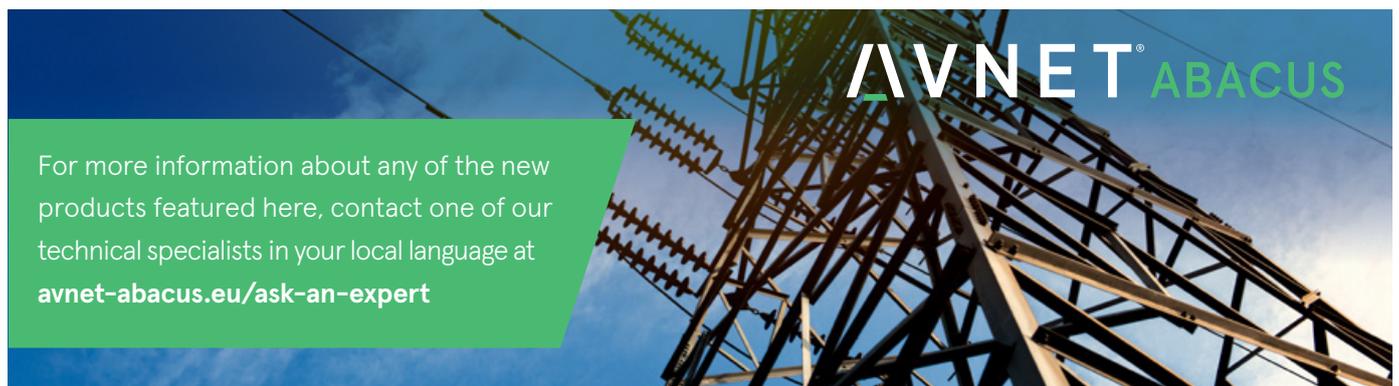


New product introductions
from Avnet Abacus: Spring 2022

NPI solutions

Welcome to the NPI brochure from Avnet Abacus, our round up of the latest product and technology innovations to enhance your design. Click on the pictures to view full product details and datasheets.

Featured manufacturers

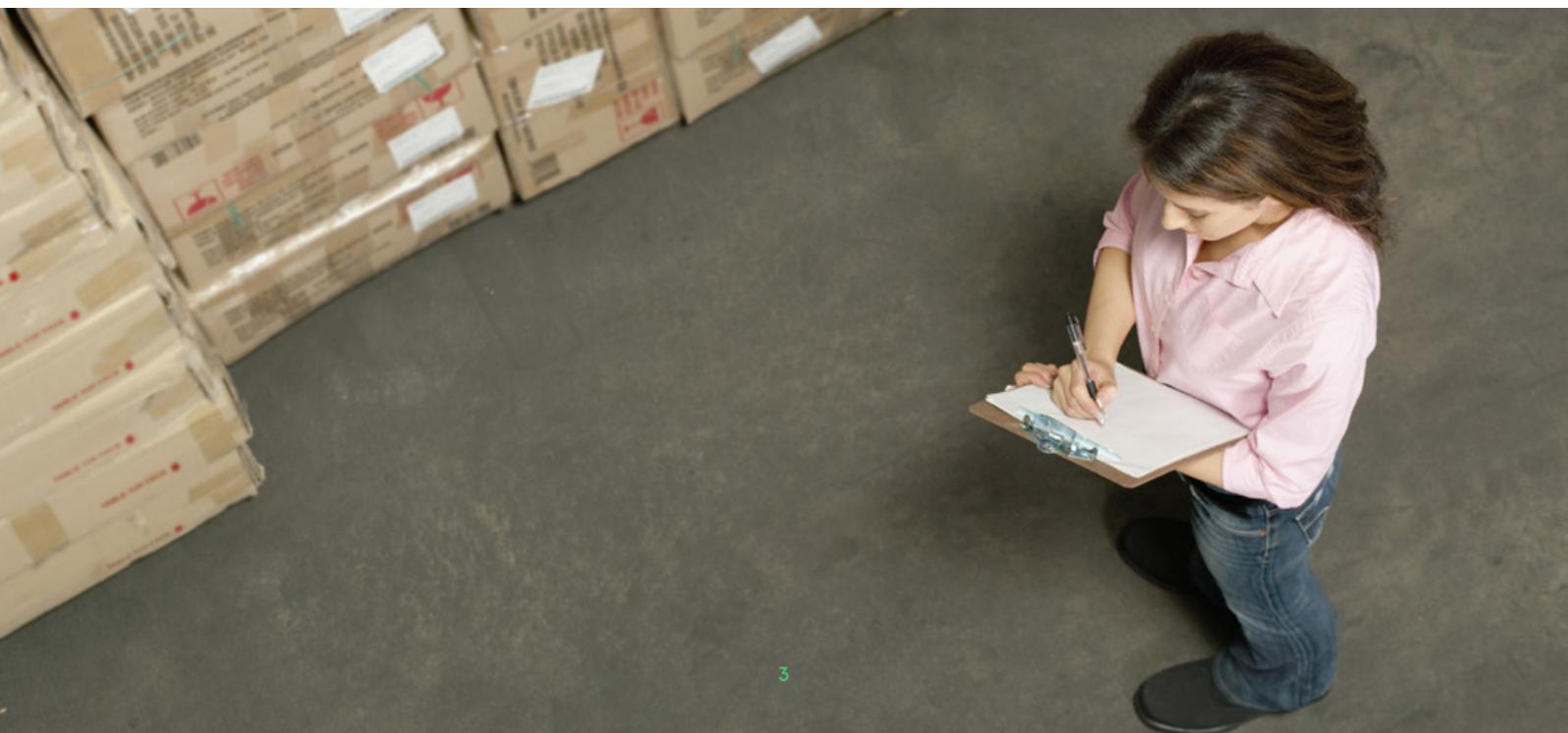


PRODUCTS

Connectors	4
Electromechanical	31
Passive	35
Power	47
Energy storage	57
RF and wireless	59
Sensors	61

LINECARDS

Connectors	70
Electromechanical	71
Passive	72
Sensors	73
Power	74
Batteries	75
Wireless	76
Antennas	76
Wireless charging	76



AMPHENOL SIGNAL|MATE C091 M16 - QUICKLOCK SERIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Through its sophisticated design and the efficiency the signalmate® C091-series from Amphenol has become a recognised industry standard.

The modular structure of the series enables a broad field of applications. Because of its wide temperature range far below or above freezing level and its suitability for machines with a high number of strokes, the C091-series meets the challenges for several environmental conditions.

Features

- Optimal for outdoor use
- No corrosion issues due to the plastic housing
- IP68 rating, sealed against the ingress of water
- The quick-lock system enables easy handling
- Significant time savings during the plugging process
- A secure connection confirmed by click sound of the locking mechanism

Applications

- Measuring instruments and equipment
- Factory automation
- Drive systems and components
- Lighting technology
- Entertainment industry
- CCTV/security and camera surveillance
- Signal and low power transmission for various other applications

AMPHENOL ICC 103 SERIES MICRO BOARD-TO-BOARD 0.6MM CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Amphenol's 103 series are 0.35mm pitch micro board-to-board connectors designed for high density applications. They support extreme low profile 0.60mm stack height and high current rating up to 5A. These connectors are offered in 4 to 60 positions. These meet USB 3.1 Gen. 2 signal transmission rates and are ideal for consumer applications such as mobile phone, smart watch, smart glasses and VR/AR devices.

- Low profile connector design with fine pitch
- High current rating up to 5A
- Double contact points ensure enhanced contact stability
- Wide operating temperature range from -40°C to +85°C

Features

- Low profile connector design with fine pitch
- Suitable for applications that have space constraints
- Self-cleaning design high removal and low insertion force
- High current rating up to 5A
- Supports high power application requirements
- Double contact points
- Enhanced contact stability high temperature thermoplastic housing
- Withstands wide operating temperature range (-40°C to +85°C)
- Lead- and halogen-free
- Meets environmental, health and safety requirements

Applications

- IoT
- Communications

Connectors

AMPHENOL ICC B406/407/410 0.80MM FLOATING BOARD-TO-BOARD CONNECTORS



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

Amphenol's B406/B407/B410 series are 0.80mm pitch floating board-to-board connectors which support stack height up to 23mm and positions from 30 to 120. Its unique connector design has a floating range of ± 0.50 mm in the X, Y and Z directions which makes it resistant to vibration. It tolerates misalignments during mating or vibrations in pick-and-place processes, improving overall contact reliability. It also supports speed performance up to 2.5Gb/s to meet high transmission requirements.

- Floating range of ± 0.50 mm in the X, Y and Z directions
- Double contact points
- B406 (vertical header) with B407 (right angle receptacle): 11.9mm
- B406 (vertical header) with B410 (vertical receptacle): 23mm

Features

- Floating range of ± 0.50 mm in the X, Y and Z directions
- Tolerates misalignments during surface mounting process or mating, and also improves overall contact reliability during vibration
- Double contact points
- Ensures enhanced contact stability
- Up to 2.5Gb/s data rates
- Meet high-speed data transmission requirements of customers
- High-temperature thermoplastic housing
- Wide operating temperature from -40°C to $+105^{\circ}\text{C}$

Applications

- Car multimedia
- Car navigation
- Dashboard
- PND
- Base station
- Power
- Switches
- Notebook
- Tablets
- Wearables
- Gaming
- DSC
- LCD and PDP TV
- Router
- Server
- ODD
- HDD
- Sensing element
- Monitoring camera
- Human machine interface
- Industrial PC
- Robotics
- Ultrasonic
- Patient monitor
- MRI
- CT
- Infusion pump

AMPHENOL ICC COMBOSTAK® AND POWERSTAK® BOARD-TO-BOARD CONNECTORS



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

ComboStak® and PowerStak® are compact, hybrid (signal and power) and power board-to-board connectors. ComboStak® combines existing, BergStak® 0.8mm pitch signal pins with 2mm pitch power blades. PowerStak® is the power-only version. Both ComboStak® and PowerStak® provide high signal and current density with a wide range of stack heights.

Features

- 2mm pitch for power system
- High current carrying capacity with miniaturised shape to save space and cost
- Power distribution and control in one connector
- Signal pin continues to match BergStak® 0.80mm
- Supports stack height from 5mm to 20mm, power position from 2pos to 10pos and signal position from 6pos to 140pos
- Supports a wide range of applications
- Scoop proof housing with ± 0.9 mm misalignment tolerance
- Supports secure blind and automatic assembly with cost effective
- Housing with metal hold down
- Guarantees high PCB retention force
- Outstanding 4 points contact design
- Offers good contact performance and low mating force
- Optional locating pegs
- Enables easy manual assembly
- High temperature LCP material

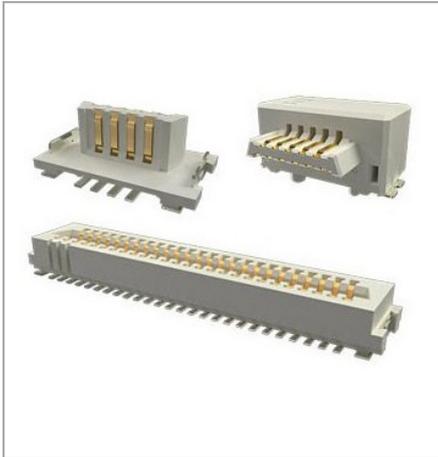
- Supports operating temperatures to $+125^{\circ}\text{C}$
- Lead-free, RoHS and halogen-free compliant
- Meets environmental, health and safety requirements
- High current carrying capacity with miniaturised shape
- Up to 20A per power blade
- 2 to 10 power blades on 2mm pitch
- 6 to 140 signal pins on 0.8mm pitch
- Reliable 4 contact point power contact design
- Signal speed is up to 12Gb/s
- 5mm to 20mm stack heights (1mm increments)
- Self-alignment for blind mating
- Meets USCAR-2 V2 shock and vibration

Applications

- Automotive
- Communications
- Industrial

Connectors

AMPHENOL ICC CONAN® LITE 1MM CONNECTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Conan® Lite 1mm connectors come with a robust metal down feature that helps in establishing a reliable connection with the PCB in both parallel and perpendicular board-to-board applications. These connectors also feature an audible “click” sound ensuring mating in place. Conan® Lite vertical headers, receptacles and right angle headers are offered in 9 to 69 positions and 4.15mm to 7.5mm mating heights, making them suitable for a wide range of applications.

- A comprehensive solution for various applications
- Supports reliable and secure mating
- Audible “click” to ensure perfect mating
- Supports high speed data transmission
- Supports auto reflow process

Features

- Vertical headers, receptacles and right angle headers are offered in 9 to 69 positions and 4.15mm to 7.5mm mating heights
- Application flexibility
- Protected terminals and polarisation feature on housings
- Supports reliable and secure connection by avoiding mismatching or reversed mating
- Unique audible “click” sound when mating is in place
- Mating in place reminder
- 8Gb/s data transmission
- Supports high speed applications
- Pick up cap and packed in tape & reel
- Supports auto reflow process for users

- Polarised locating pegs on housings
- Easy and correct board orientation on PCB
- Robust metal hold down
- Ensure reliable connection with PCB

Applications

- Data
- Industrial and instrumentation
- Automotive

AMPHENOL ICC D-SUBMINIATURE (D-SUB) ACCESSORIES



[VIEW PRODUCT DETAILS](#) 

Amphenol’s D-Subminiature (D-Sub) connectors are part of the industry standard and are one of the most popular input/output interconnects, addressing a wide variety of applications including telecommunications, industrial and medical.

- Prevents accidental mismatching
- Hoods available in 9 to 50 positions for different connector pin configurations
- Metal hoods available in straight and angled terminations for EMI/RFI shielding
- Dust caps available in metal and plastic versions
- Locking screws come with UNC 4 to 40 and M3 thread options

Features

- Hoods available in plastic, metalised and metallic form with locking screws
- Supports cable connection and prevents risks of pulling up and accidental mismatching
- Hoods available in 9 to 50 positions
- Suitable for different connector pin configurations including high density series
- Metal hoods available in straight and angled terminations
- Suitable for EMI/RFI shielding
- Hoods available with cable clamps and jackscrews
- Assures secure connection with required strain relief
- Hoods available in different orientations and locking options
- Supports various customisation needs

- Range includes different locking devices like screw locks and lever locks
- Ensures secure and reliable connection
- Screws available in both UNC 4 to 40 and M3 thread options
- Ensures connector intermateability
- Metal and plastic dust caps
- Safeguards connector from dust and dirt when kept in unmated condition

Applications

- Automotive
- Communications
- Industrial

AMPHENOL ICC FLEXLOCK® 2.54MM FPC-TO-BOARD CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

FlexLock®2.54mm FPC-to-board connectors are designed to address the growing demands of the automotive market. These compact USCAR-T2V2 compatible connectors have a nominal current carrying capacity of 3A per contact to support higher power application as well.

FlexLock® connectors are available in 10 to 30 positions in double row with vertical and horizontal TH and SMT configurations.

- USCAR-T2V2 compatible
- Reflow tin plating to reduce mating force
- Available in 10 to 30 positions
- Terminal Position Assurance (TPA)
- Connector Position Assurance (CPA)

Features

- Reflow tin plating process for terminals
- Reduced mating and un-mating force
- Current rating of 3A per contact
- Meets higher power amps requirements
- Terminal Position Assurance (TPA)
- Ensures proper terminal insertion position and retention
- Hold down design
- Increases the board grip force
- Connector Positioning Assurance (CPA)
- Ensures that connectors are properly mated and locked together

Applications

- Automotive
- Industrial

AMPHENOL ICC SINGLE PAIR ETHERNET IP20 CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Single pair Ethernet (SPE) connectors for industrial applications bring direct Ethernet connectivity to peripheral devices like sensors, actuators, and vision system cameras that operate at speeds up to 1Gb/s. SPE eliminates slow, expensive and complex fieldbus protocols and connections by simplifying and standardising existing and new industrial network systems.

Robust right angle and vertical PCB mount SPE jacks mate to field terminable plugs, providing a complete shielded interface with metal latching features. Current handling up to 4A supports PoDL (Power over Data Link) capability up to 1km.

Features

- Two way 600MHz data transmission
- Supports Ethernet protocols of 1Gb/s up to 40m, and 10Mb/s up to 1km
- 2 contacts and 2 wire cable for single pair Ethernet
- Minimises connector and cabling cost, increases cabling density and ease of installation
- 4A current rating
- Supports PoDL, up to 1km cable lengths with no signal degradation
- PCB mount jack shields have robust integrated solder tails with available board-locks

Applications

- Automotive
- Communications

AMPHENOL RF AUTOMATE® MINI-FAKRA CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Amphenol RF has introduced the AUTOMATE Mini-FAKRA connector series, the latest in automotive interconnect technology. This series offers a space-conscious, high-performance interface which is critical to the next generation of vehicle applications. Supporting up to 20Gbps data transmission, AUTOMATE connectors reduce installation requirements by up to 80% compared to previous FAKRA products.

The AUTOMATE connector series is designed with colour coded housings to provide visual guidance during the assembly process. They are also mechanically keyed to prevent mis-mating of the connectors. The foolproof installation makes this connector ideal for automotive applications such as autonomous vehicles, Advanced Driver Assistance Systems (ADAS) and 360 degree surround view cameras.

AUTOMATE is currently available in the type A right angle PCB configuration and features many of the same popular design elements as traditional FAKRA including push-on mating, which provides audible confirmation of the secure connection, and Terminal Position Assurance (TPA). The TPA is a secondary locking mechanism which provides additional security during the installation process and snaps into place when the connectors are properly mated.

The Type A connector series is fully compatible with existing mini-FAKRA connectors commonly used in automotive applications. Custom cable assemblies and IP rated sealed solutions are available by request.

Features

- Reduced package size, ideal for compact spaces
- Supports data rates up to 20GHz
- Low engagement forces
- Impact resistant

Applications

- 360° surround view camera
- ECUs and compute modules
- Autonomous vehicles
- Advanced Driver Assistance Systems (ADAS)
- GPS navigation
- 3D instrument cluster
- High bandwidth infotainment
- Remote start and vehicle controls
- V2X communication

AMPHENOL SV MICROWAVE SMPM AND SMPS TERMINATIONS



[VIEW PRODUCT DETAILS](#) 

Amphenol SV Microwave's subminiature RF/coaxial terminations are installed at the end of a bus or transmission line to prevent signals from reflecting. These devices are used to prevent electrical interference and are available in ½ W power handling.

SV Microwave manufactures a complete line of standard and custom-designed terminations, including QPL and hi-rel versions.

Features

- Nominal impedance: 50Ohms
- SMPM and SMPS series available
- Minimises signal reflection
- Power handling: ½W

Applications

- Mil/aero
- Multiport RF systems with unused ports
- Test setups and instrumentation
- Power dividers and combiners

AMPHENOL SV MICROWAVE LOW PROFILE SOLDERLESS PCB EDGE LAUNCH CONNECTOR



[VIEW PRODUCT DETAILS](#) 

Amphenol SV Microwave's low profile high speed RF/coaxial solderless edge launch connectors are ideal for high frequency PCB applications where precision is key. These connectors are designed with minimal components to maximise signal integrity and RF performance. Additionally, these rugged, durable and reusable connectors are 30% smaller than the standard flange allowing for a smaller footprint on your board. These connectors can accommodate multiple PCB thicknesses and do not cause damage to the printed circuit board. Current interface configurations include our high frequency SMA, 2.92mm, 2.4mm and 1.85mm series.

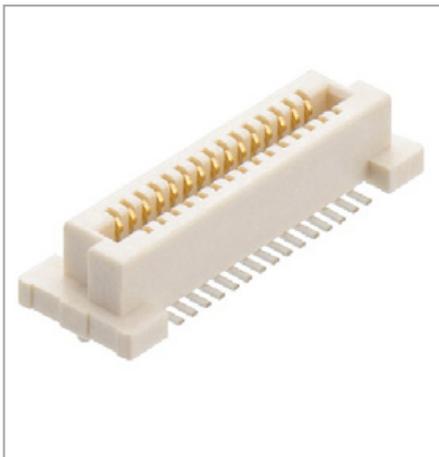
Features

- Low profile, solderless compression mount for fast and easy installation (includes screws)
- Designed with minimal components to maximise signal integrity and RF performance
- Reduced flange (30% smaller than the standard flange) for smaller PCB footprint
- SMA, 2.92mm, 2.4mm, and 1.85mm series available
- Cost effective solutions for testing
- Durable and rugged design
- Adjustable to accommodate multiple PCB thicknesses
- Minimal reflections through impedance matched PCB launch

Applications

- 5G wireless
- RF test and measurement boards
- Rapid prototyping
- High speed digital component test
- Military and aerospace

HARWIN 0.8MM PITCH BOARD-TO-BOARD CONNECTORS



[VIEW PRODUCT DETAILS](#) 

With Archer 0.8mm, you can achieve a compact, capable, industrial-grade connection with a high pin count. Designed for mezzanine daughter-board to motherboard layouts.

Capable of 0.5A per contact at just 0.8mm pitch, there are up to 120 contacts. Fully shrouded designs with polarised end features ensure confidence in mating and connection protection.

The connectors are supplied ready for high volume automation with pick and place caps in tape & reel packaging. They are stocked and ready for your production needs. Quality is assured by Harwin.

Features

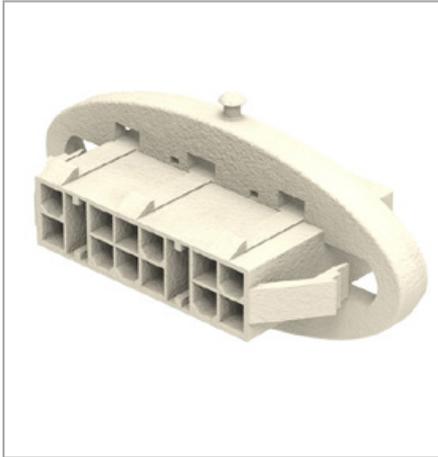
- Compact 0.8mm pitch
- Minimal board real estate used
- Up to 120 contacts
- High level of connections in one device
- Polarised and shrouded
- Eliminate mis-mating and accidental damage to contacts
- Different size location pegs ensure correct orientation on the PCB and no movement during soldering
- Surface mount terminations, tape and reel packaging
- Ideal for high volume automated assembly 5mm mating height
- Low-profile board-to-board connections, great for mezzanine to motherboard applications

Applications

- Industrial
- Embedded computing, control and monitoring systems, sensor modules, IoT connection equipment
- Test and measurement
- Smart meters, mobile monitoring devices, laboratory measurement systems
- E-vehicles
- Battery management units, intelligent control systems, camera and lidar units
- Retail
- Point-of-sale equipment, warehouse inventory systems, POS terminals
- Consumer electronics
- Home appliances, building automation
- Fire and security
- Monitoring and detection equipment

Connectors

MOLEX 214372 SERIES MINI-FIT SIGMA FIP HYBRID CONNECTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Mini-Fit sigma sealed wire-to-wire connectors utilise traditional Mini-Fit TPA2 terminals and wire gauges while providing protection from moisture, foam, dust debris ingress, and features the ability to connect multiple receptacles to a single panel mount plug.

Features

- Receptacles and plugs accept both standard Mini-Fit and Mini-Fit Plug crimp terminals
- Positive locking housings
- Crimp terminals are produced from a proprietary, high-current alloy
- Terminals feature a patented, elongated dimple design
- Select series offer up to 1,500 mating cycles with gold terminals; standard series support 100 mating cycles with gold-plated terminals; 75 mating cycles with tin-plated terminals
- Self-aligning interface
- Blind-mating interface
- Terminal Position Assurance (TPA) with secondary locking feature
- Backshell option available
- Panel mount and vertical header options
- Visual colour pairing (colours can be intermated)
- Robust latch design
- V-0 Glow Wire combination resin

Applications

- Automotive
- Commercial vehicles
- Consumer
- Data/communications
- Home appliances

MOLEX FCT CRIMPING TOOLS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Molex crimping tools provide excellent performance for reliable electrical connections. These tools are available for high-quality, turned contacts from our D-Sub products and offer the appropriate positioners and dies for various cable cross-sections.

Features

- Manual hand crimp tool
- Variability
- High-quality construction
- Automatic processing lock
- Portable for field use

Applications

- Commercial aerospace
- General market
- Industrial automation
- Medical
- Railways
- Robotics
- Test and measurement

Connectors

MOLEX L1NK 250 PRE-CRIMPED LEADS



Molex's range of pre-crimped leads offers a simple, cost-effective solution for prototyping, pre-production and mass production requirements. These leads are offered in female-to-female and male-to-male configurations in lengths of 75mm to 600mm.

Applications

- Washers and dryers
- Telecommunications/networking
- Medical
- Automotive
- Industrial

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

MOLEX MICRO-FIT+ SINGLE ROW POWER CONNECTORS



The Micro-Fit+ connector system offers a 3mm pitch. A higher-current rating of 12.5A and superior design options for flexibility and efficient assembly.

Features

- Fully isolated contacts on each side of the interface
- Smaller PCB footprint
- Fully polarised housings
- Reflow options available
- Enhanced TPA design
- V-0 Glow Wire combination resin
- Reduced mating force by 40%
- Unique keying design

Applications

- Consumer
- Telecommunications/networking
- Medical
- Sustainable energy
- Automotive

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Connectors

MOLEX MINI-FIT SR. PRE-CRIMPED LEADS



Molex's range of pre-crimped leads offers a simple, cost-effective solution for prototyping, pre-production and mass production requirements. These leads are offered in female-to-female and male-to-male configurations in lengths of 75mm to 600mm.

Features

- Available in 150mm and 300mm lengths on requirements
- Available for most Molex product families
- Leads crimped on both ends

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

MOLEX MICRO-ONE WIRE-TO-BOARD CONNECTORS WITH TPA



Compact Micro-one wire-to-board connectors with integrated ISL, independent TPA and potting capability provides secure electrical contact, superior mating retention and protection against harsh environmental conditions.

Features

- 2mm pitch low profile design
- UL certified connectors
- Independent Secondary Lock (ISL)
- 2- to 8- circuit vertical and right-angle header assembly
- Terminal Position Assurance (TPA)
- Potting liquid (up to 7mm height)

Applications

- Consumer
- Industrial

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

MOLEX OFF-THE-SHELF (OTS) MX150 SERIES PRE-CRIMPED LEADS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Molex has expanded its range of MX150 pre-crimped leads.

Molex pre-crimped leads offer a simple, cost-effective solution for prototyping, pre-production and mass production requirements. These leads are offered in female-to-female and male-to-male configurations in lengths of 75mm to 600mm.

Features

- Pre-crimped and fully tested cables
- Available in 75mm to 600mm lengths
- Leads crimped on both ends
- UL listed cables
- Available for most popular Molex families
- Decreases time to market
- Works well for all prototype and pre-production requirements
- Allows for wire-to-wire applications and when cut in half, wire-to-board applications
- Assures high-quality approved materials
- Helps customers choose the right connector before investing in application tooling

MOLEX OFF-THE-SHELF (OTS) EXTREME GUARDIAN OVERMOLDED CABLE ASSEMBLIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Off-The-Shelf (OTS) EXTreme guardian overmolded assemblies with locking screw are available in 2- and 3-circuit sizes.

Features

- Capable of carrying 50A to 60A of current
- Connector-locking screw
- Polarised mating geometry
- Locking tang-on terminals

Applications

- Aerospace and defence
- Data communication
- Electric vehicles
- Medical
- Solar
- Telecommunication equipment manufacturers

MOLEX OFF-THE-SHELF (OTS) KK 2.54 TIN DISCRETE CABLE ASSEMBLIES



Off-the-Shelf (OTS) KK2.54 tin discrete cable assemblies offer three cable sizes (150mm, 300mm and 600mm) and a variety of circuit sizes to facilitate both prototyping and global pre-production.

Features

- Tape-and-reel packaging with pick-and-place caps available
- Optional kinked PC tail
- KK RPC headers offered in high temperature nylon and reflow matte tin plating
- Friction-lock headers and receptacles
- Dual-cantilever terminal
- Polarising header backwalls, polarising ribs on receptacles, and polarising pegs

Applications

- Automotive
- Consumer
- Data/telecommunications
- MedTech

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

MOLEX OFF-THE-SHELF (OTS) PICOBLADE WIRE CABLE ASSEMBLIES EXTENSION



Off-the-shelf PicoBlade cable assemblies come in a variety of cable lengths in a compact connector to support both prototyping and global production.

Features

- Point-to-point single-row configurations for PicoBlade designs immediately available
- Meets 2011/65/EU RoHS compliance
- Built using UL1061 discrete wires
- Built in ISO- and TS-16949-certified facilities
- Pin-to-pin map configurations
- PicoBlade receptacles small pitch and friction lock

Applications

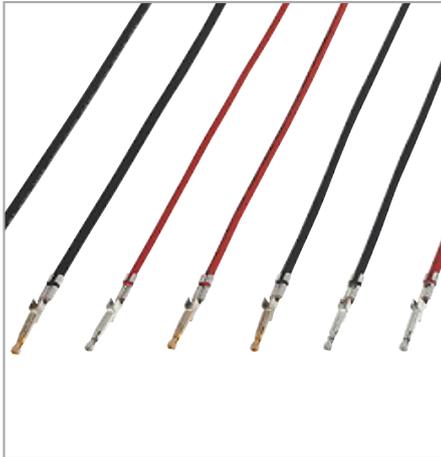
- Consumer
- Commercial vehicle
- Industrial
- Medical

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Connectors

MOLEX OFF-THE-SHELF ULTRA-FIT SERIES PRE-CRIMPED LEADS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Molex has expanded its range of Ultra-Fit off-the-shelf pre-crimped leads.

Molex pre-crimped leads offer a simple, cost-effective solution for prototyping, pre-production and mass production requirements. These leads are offered in female-to-female and male-to-male configurations in lengths of 75mm to 600mm.

Features

- Pre-crimped and fully tested cables
- Available in 75mm to 600mm lengths
- Leads crimped on both ends
- UL listed cables
- Available for most popular Molex families
- Decrease time to market
- Works well for all prototype and pre-production requirements
- Allows for wire-to-wire applications and when cut in half, wire-to-board applications
- Assures high-quality approved materials
- Helps customers choose the right connector before investing in application tooling

MOLEX POWERPLANE BUSBAR POWER CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

PowerPlane Busbar power connectors deliver high-current performance along with various configurations and feature options, making them applicable for a wide range of power-distribution applications.

Features

- Float-mount design available
- One part number mates with 3mm- and 3.18mm-thick busbar tabs
- High-conductivity copper alloy
- Dimensionally compatible with competitors' connectors
- Silver plating for lower resistance
- Low-voltage drop
- Mounts to a busbar via two holes using customer-supplied machine screws as well as solder tab options
- Multiple, independent points of contact

Applications

- Consumer
- Data centre solutions
- Networking
- Telecommunications
- Industrial automation
- Commercial vehicles
- Energy storage systems

Connectors

MOLEX PREMO-FLEX ONE-TOUCH FLAT FLEXIBLE CABLE (FFC) JUMPERS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Designed to mate with Molex's easy-on one-touch connectors (series 200485), this Premo-Flex FFC Jumper offers single-step mating and a locking mechanism to ensure superior mating retention.

Features

- Mates with Molex's easy-on one-touch connector (series 200485)
- Optional ground terminal
- High operating temperatures
- Right-angle and vertical orientations, up to 80 circuits

Applications

- Consumer
- MedTech
- Data/computing
- Automotive
- Industrial

MOLEX SOLDERLESS RING TERMINAL PRE-CRIMPED LEADS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Molex has expanded its range of pre-crimped leads to include solderless ring terminal versions. Molex pre-crimped leads offer a simple, cost-effective solution for prototyping, pre-production and mass production requirements. These leads are offered in female-to-female and male-to-male configurations in lengths of 75mm to 600mm.

Features

- Pre-crimped and fully tested cables
- Available in 75mm to 600mm lengths
- Leads crimped on both ends
- UL listed cables
- Available for most popular Molex families
- Decreases time to market
- Works well for all prototype and pre-production requirements
- Allows for wire-to-wire applications and when cut in half, wire-to-board applications
- Helps ensure high-quality approved materials
- Helps customers choose the right connector before investing in application tooling

MOLEX PREMO-FLEX SHIELDED FLAT FLEXIBLE CABLE (FFC) JUMPERS



The Premo-Flex shielded flat flexible cable jumpers family of products offers a wide range of standard options for applications requiring protection from electromagnetic interference (EMI).

Features

- Shielded cable
- Low-profile, ultra-thin foil aluminium shielding and fine pitch (0.50mm)
- Grounded pins
- Tin plating
- Cable shown with three grounding points as a custom solution
- Custom capabilities available

Applications

- Consumer
- Medical
- Datacoms
- Automotive
- Industrial

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

MOLEX SINGLE ROW (OTS) MICRO-FIT OVERMOLDED CABLE ASSEMBLIES



Off-the-Shelf (OTS) micro-fit double-ended, overmolded assemblies with strain relief are available in multiple circuit sizes and cable lengths for a rugged signal connection.

Features

- Both custom and off-the-shelf assemblies available
- Capable of carrying 5A of current
- Locking tang on terminals
- Polarised mating geometry
- Overmolded strain relief
- Positive latching

Applications

- Consumer
- Data/computing

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE CONNECTIVITY 0.4MM FINE PITCH BOARD-TO-BOARD CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

When it comes to high-reliability in small spaces, TE delivers with fine pitch board-to-board connectors and shielded board-to-flexible printed circuit connectors. These connectors have robust anchor points for durability, making them a design-flexible, effective solution for a variety of today's smart devices.

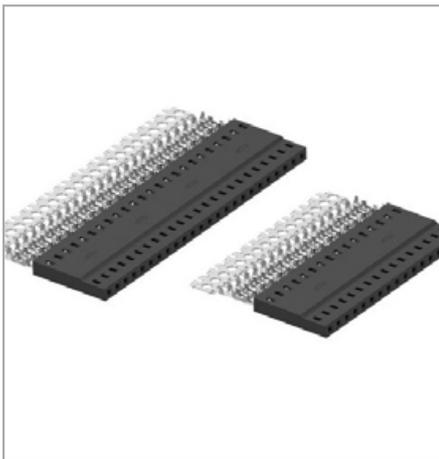
Features

- 0.4mm centreline
- 8 to 40 positions available
- Stacking height ranges 0.8mm and 0.98mm
- Width ranges from 2mm to 2.98mm
- Improved cost effectiveness by reducing number of components needed and the size of the tooling platform
- Super narrow body with sufficient pick and place area
- Design flexibility allows position extensions
- Ni-barrier to help eliminate solder wicking issues

Applications

- Wearables
- Mobile phones
- Tablet PCs
- Rugged phones
- Ultraportable devices
- Notebooks
- Navigation systems
- Gaming consoles
- Camera links

TE CONNECTIVITY AMPMODU 2MM WIRE-TO-BOARD IDC RECEPTACLE PLATFORM



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) AMPMODU 2mm connectors reliably and economically meet the packaging and interconnection requirements of today's miniature sophisticated electronics, occupying 38% less space than traditional 2.54mm centreline connectors. This AMPMODU 2mm wire-to-board receptacle assembly has been designed with pre-loaded discrete wire Insulation Displacement Contacts (IDC), enabling fast termination without the need to strip the wire. The wire can be applied with a manual or pneumatic pistol grip tool, which has a low implementation cost and is easy to operate.

In addition, our housing is available with an optional detent latching for greater connection reliability. IDC is an alternative solution to our AMPMODU 2mm crimp snap-in product.

Features

- 38% space savings on a PCB as compared to traditional 2.54mm centreline connectors
- Fast termination/installation without need to strip the wire
- Low application cost and time savings with TE recommended pistol grip tooling
- Interchangeable IDC and crimp snap-in contacts allow for easy replacement of damaged/faulty contacts
- IDC and crimp receptacles mate with the same headers

Applications

- PLC/IO devices
- Servo drives
- Industrial controls
- Material handling
- Instrumentation and test equipment
- Building and factory automation
- Energy storage systems

TE CONNECTIVITY AMPMODU MTE OFF-THE-SHELF CABLE (OTC) ASSEMBLIES



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) AMPMODU MTE off-the-shelf cable assemblies are 2.54mm centreline interconnection system utilised in wire-to-board and wire-to-wire applications which is very popular particularly for its robust and effective positive latch, making these connectors useful in vibration and shock environments. The product comes in two contact options, Insulation Displacement Contacts (IDC) or crimp snap-in, which customers can choose from based on their volume and application needs. The AMPMODU MTE off-the-shelf cable assemblies allow customers to quickly obtain standard cable assemblies for their prototyping and testing needs.

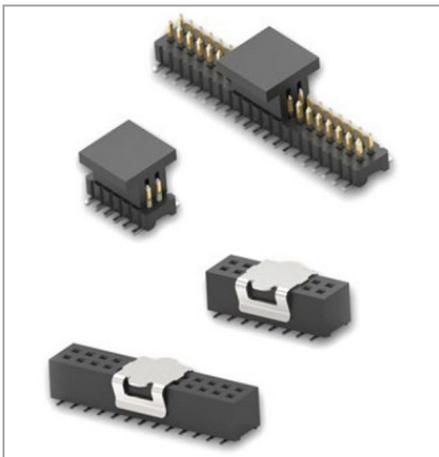
Features

- Polarisation feature reduces the chance of incorrect mating, providing increased safety
- IDC option offers time savings with lower applied cost
- Interchangeable IDC and crimp snap-in contacts allow for fast and easy replacement of damaged/faulty contacts
- Swage option on posts helps to avoid movement on boards prior to soldering
- Reflow solderable board-mount headers save time and money with one pass through soldering process
- Coupling shrouds permit ganging of smaller assemblies to form larger single or double row latching connectors

Applications

- Industrial automation and controls
- Building and home automation devices
- Robotics
- Material handling equipment
- Instrumentation and test equipment
- Medical devices
- Automotive controls and infotainment
- Consumer devices (appliances, printers, scanners, computers etc.)

TE CONNECTIVITY AMPMODU SMALL CENTRELINE INTERCONNECTION SYSTEMS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) AMPMODU small centreline interconnection systems are fine pitch 1mm connectors that offer 85% space savings on the board when compared to standard 2.54mm pitch products. Their dual-beam contact design provides a reliable electrical connection even in severe shock and vibration environments. To serve a broad range of design requirements, the portfolio offers up to 100 positions with two plating options and supports automated surface mounting and reflow processes.

Features

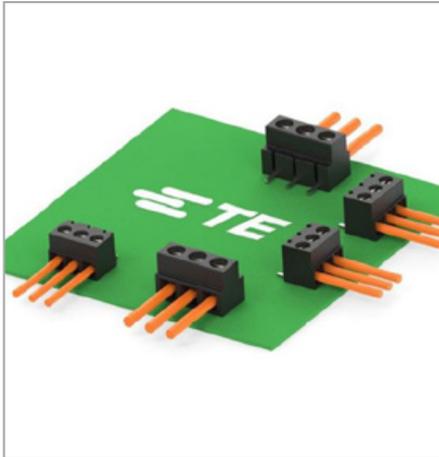
- Manufacturing flexibility in automated environment
- Surface mount configuration with pick and place cap
- Improved durability and corrosion resistance with gold plating
- Time savings thanks to reflow capable materials
- Greater flexibility in assembly of boards with dual entry receptacles

Applications

- Industrial controls
- Building and home automation devices
- Servo drives
- Programmable Logic Controllers (PLC)
- IO devices
- Telecommunication equipment
- Robotics
- Instrumentation and test equipment

[BUY NOW](#) 

TE CONNECTIVITY BOARD MOUNT REFLOW TERMINAL BLOCK



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) PCB terminal blocks feature various versions and wire termination methods, including rising clamp technology, push-in clamp and screw clamp. The design of PCB terminal blocks consists of one-piece board mount terminal blocks and two-piece plug connectors with mating straight and right-angle shrouded headers. The board mount terminal blocks and PCB headers are stackable end-to-end without loss of centreline spacing.

This specific board mount reflow terminal block series covers a variety of one-piece, vertical, low profile, surface mount terminal blocks in high-temperature resistant material with rising clamp technology via screw termination. It is an important extension of the TE PCB terminal block portfolio for automated reflow production.

Features

- The small dimensions and reflow capability create great opportunities for building automation applications where space savings are key to drive smaller overall device size or to increase electronic content within the existing application space
- Easy termination and aligned to trend of moving from wave to reflow soldering, allowing for automated assembly lines and option for soldering on both sides of the board
- Smaller sized and low weight components can easily become unstable during the soldering process. A closed clamp and adding positioning pegs increases stability and improves planarity, significantly reducing problems during the soldering process

Applications

- Building automation
- HVAC
- Lighting
- Elevators
- Building entry and security

TE CONNECTIVITY CORCOM 3-PHASE HIGH PERFORMANCE DIN EMI FILTERS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) Corcom 3-phase DIN rail mounted EMI filters portfolio consists of six variants (1A to 100A ratings) which include fully potted and bookshelf (BS) types, with performance ratings of standard, high, and very high. These filters are used in many different applications such as industrial machinery, factory automation equipment, servo drives, variable frequency drives, frequency inverters and converters, robotics, renewable and alternative energy, and EV charging stations.

Features

- Chassis/DIN rail mountable (clips onto customer supplied DIN rail)
- Suppresses EMI noise
- Does not require mounting screws
- Standard attenuation performance
- Lightweight, compact and easy to install

Applications

- Industrial machinery
- Factory automation equipment
- Servo drives
- Variable frequency drives
- Frequency inverters/converters
- Robotics
- Renewable/alternative energy
- EV charging station

Connectors

TE CONNECTIVITY DT-XT SEALED CONNECTOR SYSTEM



[VIEW PRODUCT DETAILS](#) 

Customers require a highly reliable, securely sealed connection system to minimise electrical failures and prevent costly machine downtime. TE Connectivity's (TE) DT-XT connectors are a new extension of the DT connector portfolio that features innovative, high-performance sealing technology for all your commercial vehicle applications even in the harshest environmental conditions. The DT-XT connectors offer increased flexibility, improved tear resistance, and seal positioning with advanced sealing materials and covalent bonds. With the integrated locking feature, the connection system ensures secure mating and unmating of connectors. Finger grips on the locking mechanism provide a ribbed surface that makes it easier to connect, disconnect, and release, even when fingers are wet, dirty, or oily.

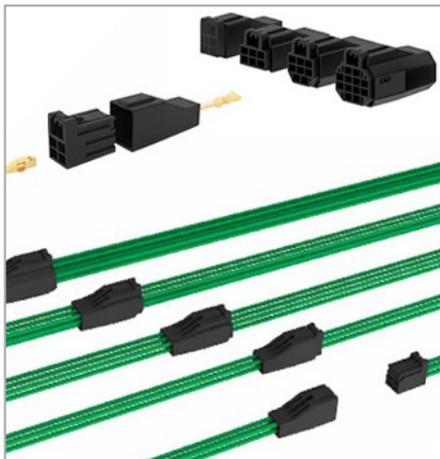
Features

- Offers greater flexibility and improved tear resistance with advanced sealing materials
- Provides high sealing requirements for harsh environments and prevents electrical failures in critical wiring applications
- Protects the rear seal against water ingress with integrated rear covers on the DT-XT housings
- Ensures secure mating and unmating of connectors with strong interlock formed by covalent bonding between the thermoplastic plug housing and the Liquid Silicone Rubber (LSR) seal

Applications

- ABS/ESC brake units
- Actuators
- Hydraulic pumps
- Switches
- Vehicle sensors
- Solenoids
- Lighting

TE CONNECTIVITY DYNAMIC D1000 SLIM WIRE-TO-WIRE CONNECTOR



[VIEW PRODUCT DETAILS](#) 

Dynamic D1000 slim small wire-to-wire connectors are suitable for narrow spaces in small industrial equipment and small machinery applications. The size of the D1000 is 80% smaller than the D1200 series with low interference risk and streamlined design. Keying and the locking feature provide reliability and reduce unexpected unmating and lever breakage in narrow spaces such as robotic arms and other customer applications.

Features

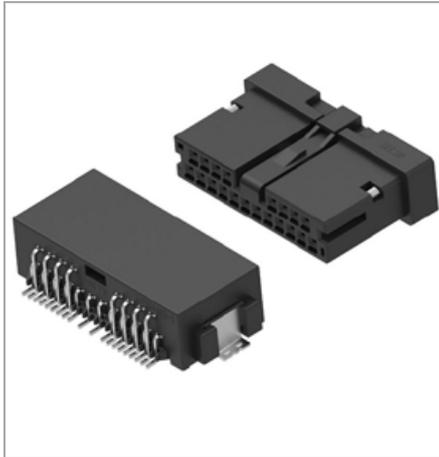
- Smaller size increases the connectivity per used space
- Reduces risk of connector breakage by interference in narrow spaces
- Reliability increases as the user can hear when connector is properly locked
- Easy mating and crimping process to speed up installation time

Applications

- Robotics
- Small industrial robots
- Collaborative robots
- Scala robots
- Automatic Guided Vehicle (AGV)
- Servo motors
- Sensors

[BUY NOW](#) 

TE CONNECTIVITY DYNAMIC MINI SERIES CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Dynamic Mini series connectors for signal transmission on PCBs have a lower profile than the Dynamic D1000, which provides extra valuable space on the board. Dynamic series connectors perform to LV 214 test requirements. A positive audible locking feature makes life easier for service engineers carrying out installation and maintenance in the field.

Housings in high-temperature nylon permit reflow soldering, speeding up system assembly therefore saving on total cost. High reliability comes from the high retention force that the connectors exhibit between the contact and the housing, thanks to their "second lock" design. Applications are getting smaller and smaller, however, the requirements of the application will remain the same or increase. The Mini Dynamic series is smaller in size but offers the same performance as bigger alternatives.

The protective latching concept helps to avoid accidental unlatching with a transitional sinking surface. This is one of the features that supports the low profile of this product.

Features

- Faster system assembly due to SMT reflow capability

Applications

- New energy
- Automation
- Machinery
- Robotics
- HMI
- Servo drives
- Process controllers

TE CONNECTIVITY EP-SMA 27GHZ RF CONNECTORS, ADAPTORS AND ASSEMBLIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) EP-SMA 27GHz RF connectors, adaptors and cable assemblies provide low insertion loss, industry-leading Voltage Standing Wave Ratio (VSWR), and other mechanical and electrical functions to meet the needs of 5G, ATE, bench top, module, wireless devices and radar in test and measurement, AD&M, and electrical and electronic components industries. With the same footprint as SMA-6GHz, 12GHz, 18GHz solutions, there is typically no need to change the layout of your customer's applications to allow higher frequencies of up to 27GHz or higher electrical SMA performance.

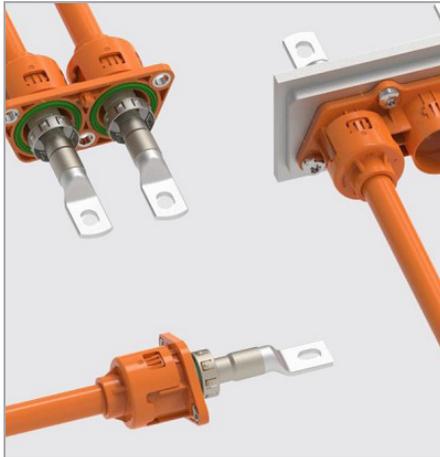
Features

- Industry-leading SMA performance: EP-SMA 27GHz Voltage Standing Wave Ratio (VSWR) and insertion loss performance is superior to previous generations of SMA-6GHz, 12GHz, and 18GHz. EP-SMA 27GHz adaptors perform at <math><1.15\text{VSWR}</math> and cable assemblies per format <math><1.20\text{VSWR}</math> frequency (as compared to most competitive product's performance of 1.25VSWR)
- Economic upgrade solution: maintains the same footprint as SMA-6GHz, 12GHz, and 18GHz, so there is typically no need to change the layout if a customer requires higher frequency to 27GHz or higher electrical SMA performance
- Broad portfolio: the EP-SMA 27GHz portfolio includes a large breadth of SMA connectors, adaptors, and cable assemblies with frequencies up to 110GHz. Custom configurations available upon request

Applications

- 5G
- ATE (Automated Test Equipment)
- Bench top
- Modules
- Wireless devices
- Amplifiers, couplers, dividers, mixers, relays, attenuators, fitters, antennas
- Radars (radio detection and ranging)

TE CONNECTIVITY IPT-HD POWER BOLT CONNECTOR SERIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Ensuring the high EMC (Electromagnetic Compatibility) performance for hybrid and electric vehicles is the critical point for manufacturers and consumers. TE Connectivity's (TE) IPT-HD power bolt high-voltage connectors offer a new shielding design, providing low-contact resistance and thicker options for conductor cross-sections used in MCU (Motor Control Unit), e-axle, and e-motor applications for renewable energy vehicles operating in demanding environments.

Providing low contact resistance even after the vibration with 1-, 2- and 3- positions, the IPT-HD power bolt connector can be used in environments exposed to extreme temperatures (-40°C to +125°C) and excessively high engine-level vibrations. With an ever-increasing demand for low-contact resistance and flexible assembly options for a wide range of diverse applications, the IPT-HD power bolt series comes in 50mm² and 70mm² conductor cross-sections, with a 95mm² option available soon. In addition to the traditional integral wiring harness assembly and an easy machining process for mounting holes, the IPT-HD power bolt connector series provides a separate, single wiring harness for increased assembly flexibility.

Features

- Helps ensure higher EMC (Electromagnetic Compatibility) performance with a new shielding design to provide required low-contact resistance
- Withstands extreme temperatures and engine-level vibrations with an operating temperature range of -40°C to +125°C
- Provides environmental protection with IP68 and IP6K9K sealing levels
- Enables increased assembly flexibility with a separate single wiring harness in addition to the traditional integral wiring harness assembly

- Facilitates options for a wide range of diverse applications with 50mm² and 70mm² conductor cross-sections
- Offers a cost-effective solution with an easy machining process for mounting holes

Applications

- E-motors
- MCU (Motor Control Units)
- PDU (Power Distribution Units)
- E-Axles

TE CONNECTIVITY LUMAWISE ENDURANCE N+ ANSI C136.10 OPEN CAPS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) low-profile LUMAWISE Endurance N+ shorting and open caps with an integral seal gasket provides harsh environmental protection to receptacles on the roadway, street and area lighting luminaires prior to the installation of a network lighting control or when one is not required. Shorting caps are also used to designate luminaires for maintenance and to keep lights on continuously for safety. Open caps are used to temporarily disconnect service from individual luminaires while others remain energised on the same circuit.

Features

- Provides IP66 water ingress protection which reduces outdoor light fixture maintenance and extends operating life
- An alternative to light sensing control units
- Distinct cap shape improves visual distinction between standard photo controls and shorting caps
- IK08 high impact resistant

Applications

- Street and area lighting
- Roadway lighting
- Commercial outdoor lighting (i.e. parking lots, car dealerships)

TE CONNECTIVITY LUMAWISE ENDURANCE N BRACKET MOUNT RECEPTACLE ASSEMBLY



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) LUMAWISE endurance N bracket mount receptacles assemblies are available in 3, 5 and 7 position standard and rotatable configurations. These products are specifically designed for remote mount discrete and network lighting controls for outdoor street and area lighting luminaires. Remote mounting discrete and network lighting controls simplify the conversion and maintain the aesthetics of decorative acorn, antique and vintage replicas of gas and oil metal headlamps and HPS lamps that are transitioning to LED luminaires.

Features

- Reduces field installation time and costs
- Extremely reliable and versatile, provides IP66 seal rating
- Simplifies positioning of luminaire remote mounted discrete or network lighting control
- ANSI C136.10 and ANSI C136.41 compliant
- Shipped fully assembled
- Contains integral gasket
- Available with standard or rotatable receptacles

Applications

- Roadway lighting
- Street lighting
- Area lighting (parks, walkways, school campuses, etc.)
- Decorative lighting (acorn, vintage and antique)
- Commercial lighting (i.e. parking lots, car dealerships, etc.)

TE CONNECTIVITY LUMAWISE ENDURANCE S2 ZHAGA BOOK 18/Z10 CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) LUMAWISE Endurance S connector system is a complete set of products specially designed for street and area lighting. There are two main offerings. The original Endurance S Zhaga Book 18 connector system enables D4i controlled Zhaga Book 18 compliant luminaires while the Endurance S keyed connector system enables non-book 18 applications like Z10.

Extending from the Endurance S portfolio is the S2 receptacle. Offered in both Zhaga Book 18 and Z10 enabled keyed varieties the S2 receptacle introduces a two-wire per contact solution for ease of wiring and applied cost savings in luminaires with dual node architecture.

Features

- Simple insert and rotate to lock feature, no tooling needed and one handed operation to install allows luminaires to be simply and quickly upgraded
- High impact protection: IK09 rating
- Flexible mounting position. Top mounted, side mounted and bottom mounted facing
- Scalable solution allows use of Ø40mm and a Ø80mm controls with the same connection interface
- Poke-in contact design reduces logistics issues with needing different wire lengths for different luminaires
- CB certification

Applications

- Street and area lighting
- Roadway lighting
- Commercial/municipal outdoor lighting
- Outdoor luminaires
- Wall packs
- Parking lots
- Walkways photo controls
- City management systems
- Sensor modules, i.e. motion

TE CONNECTIVITY M12 D-CODE TO RJ45 CORDSETS



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

TE Connectivity's M12 Ethernet Cat5e communication package is now being extended by introducing the female configurations as well as the D-code to RJ45 cordsets. The extended 4-pole D-coded cordsets comply with Profinet, EtherCAT and Ethernet/IP protocols offering multiple options that are suitable for drag chain applications or torsional stress, depending on customer performance requirements. The Cat5e cable jackets vary between PVC, PUR and TPE which offer a unique solution toward satisfying the stringent needs of motion systems supporting both flexing and stationary industrial Ethernet requirements. The M12 D-coded cordsets, which are UL certified and have an IP67 rating for dust-tight and waterproof applications, ensure efficient, high-quality and reliable connectivity and high integrity signal transmission.

Features

- Unit remains protected and fully operational in most industrial applications
- Secured signal connections and data transmission
- Ensures the application of cable assembly in flexible installation environments
- Ensures the application of cable assembly in torsion application environments
- Oil-resistant for in use oil industrial applications
- Application of UV-resistant environment
- Enclosure rating of IP67
- 360 degrees shielding
- Jacketing is in halogen-free flame-retardant Thermoplastic Polyurethane (TPU)

Applications

- Industrial communications
- Process control systems
- Industrial machinery
- Robotics
- Industrial control and factory automation
- Test equipment
- Machine tools

TE CONNECTIVITY M12 X-CODE CORDSETS AND M12 X-CODE TO RJ45 CORDSETS



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

In industrial environments which can handle 10Gbit/s Ethernet transmission speeds, Category 6A (Cat6A) cables usually consist of standardised twisted pair cables for Ethernet and other network layers. These can handle data rates up to 10Gbit/s. In order to withstand these high speeds and data output, Cat6A cables have significant shielding and cable twist requirements.

The M12 X-code connector is specially developed for these requirements, whereby the channel pairs are separated and the degree of shielding in the connector itself has been increased. The M12 X-coded cordsets, which are UL certified and have an IP67 rating for dust-tight and waterproof applications ensure efficient, high-quality and reliable connectivity and high integrity signal transmission.

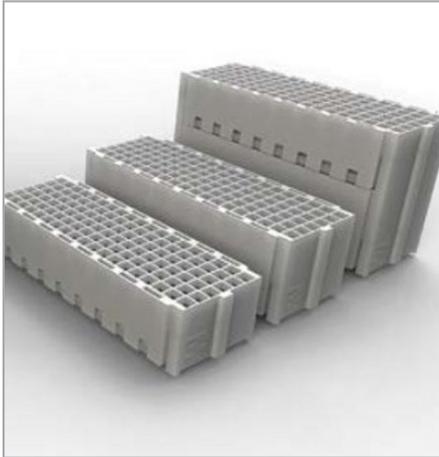
Features

- Enclosure rating of IP67
- 360 degrees shielding
- PUR cables suitable for drag chain application (up to 3 million cycles)
- TPE cables suitable for drag chain (up to 1 million cycles) and torsion applications (up to 3 million cycles)
- Ensures the application of cable assembly in flexible installation environments
- Ensures the application of cable assembly in torsion application environments
- 360 degrees shielding

Applications

- Vision systems and cameras
- Industrial communications
- Industrial machinery
- Robotics

TE CONNECTIVITY MEZALOK HIGH-SPEED LOW-FORCE XMC CONNECTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) Mezalok High-Speed Low-Force (HSLF) XMC connectors are designed for mezzanine applications for rugged embedded computing interconnects. The connectors utilise a rugged dual point contact system that meets the qualification requirements of legacy Mezalok high speed connectors. The connectors are available in 60, 114, and 320 positions with stack height options of 10mm, 12mm, 17mm and 18mm. Mezalok high-speed low-force XMC connectors meet the same rugged standards as listed in VITA 47 and VITA 72. The 114-position connector is compliant to VITA 61 and additional positions and stack heights are available. These high-speed low-force connectors feature a wide operating temperature range, excellent thermal stability, and data rates to 32+Gb/s, with VITA 42.3 pinout. Mezalok high-speed low-force connectors utilise the reliable ball grid array printed circuit board surface mount application.

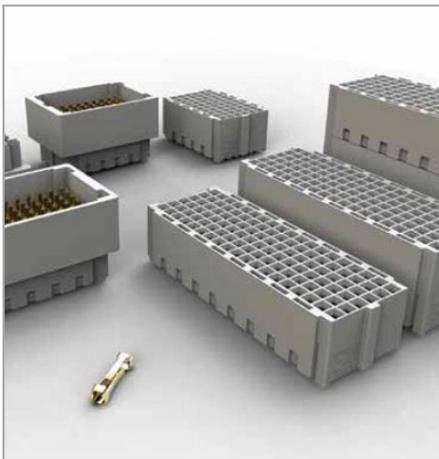
Features

- Unmating force reduction: 47%/mating force reduction: 32%
- Rugged dual point contact system
- Maintains Ball Grid Array (BGA) PCB attachment, supports standard surface mount processing
- Designed for highly rugged performance rating—meeting legacy Mezalok specification
- Testing to VITA 72 working group environment
- Thermal stability for reliable solder joints
- Multiple positions and stack heights available

Applications

- Embedded computing

TE CONNECTIVITY MEZALOK HS CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE's Mezalok HS mezzanine connectors are designed for stacking or mezzanine applications for rugged embedded computing. The connectors incorporate a quad-redundant mini-box contact system for a separable interface, and are available in 60, 114, and 320 positions with stack height options of 10mm, 12mm, 15mm, 17mm and 18mm.

Mezalok HS connectors are shock and vibration resistant per VITA 47 and 72 HALT test requirements. The 114-position connector is compliant to VITA 61. Featuring a wide operating temperature range, excellent thermal stability, and data rates to 32+Gb/s, these rugged and highly versatile connectors are ideal for high-speed embedded computing applications. Installation of Mezalok HS connectors is easily accomplished using standard BGA surface mount processes.

Features

- Rugged surface-mount mezzanine connector with 500 mating cycle durability
- Improved thermal cycling stability compared to VITA 42 connectors
- Anti-stubbing design during mating
- Mini-box contact system provides four points of contact for ultra-reliability

Applications

- Embedded computing

Connectors

TE CONNECTIVITY MULTI-FIBRE CABLE ASSEMBLIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) multi-fibre cable assemblies can provide high signal and data connectivity through only one cable to connect multiple units in the field instead of one assembly for each. This can allow for space savings within densely populated applications. The multi-fibre cable assemblies use bend-insensitive fibre G.657.A2 material and a bayonet style locking feature that provides positive feedback to the operator when fully mated. This allows for easy, fool-proof installation and reliable performance. These reliable, high quality, rugged cable assemblies can be used in harsh environments.

Features

- Space savings: high speed signals are routed completely through one cable to connect multiple units in the field instead of one assembly for each unit
- Efficient and reliable in design: cable bend insensitive fibre G657 allows for easy fool-proof installation and reliable performance. The bayonet style of the locking feature provides positive feedback to the operator when fully mated. Custom configurations available upon request
- Long-lasting in harsh environments: these reliable, high quality, rugged cable assemblies can be used in harsh environments
- Economic upgrade solution: UL- and CPR-compliant design for universal global use without requiring upgrading customer applications

Applications

- 5G
- Wireless outdoor applications
- Remote Radio Heads (RRH)
- Microwave equipment
- Industrial outdoor applications
- Robotics
- Many other outdoor harsh environments

TE CONNECTIVITY NECTOR T PLUGGABLE CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) NECTOR T pluggable connectors provide an easy-to-use, pluggable power-distribution connector-cabling system, suited for moist and wet environments (sealed IP68). NECTOR T pluggable connectors offer a complete solution including 3-way and 4-way splitters and panel mount connectors, so power-splitting is fast and easy. Installation is quick and flexible with both crimp and screw type terminals.

These sealed pluggable connectors are used specifically and offer a new solution to high humidity and harsh environment applications like garden lighting, horticultural lighting, building facade lighting and other outdoor installations.

Features

- Allows pre-terminated cables with lower labour/installation costs
- Protects against UV (sun light) rain and dust for use outdoors without functional failure due to the environment providing long life and reliability
- Provides protection to the mating interface in an unmated/open condition
- Eliminates mis-mating and potential re-work

Applications

- Horticultural lighting installations
- Farm lights
- Grow light connections
- Sealed power distribution

TE CONNECTIVITY ODVA VARIANT 1 RJ45 CONNECTORS



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

The ODVA Variant 1 RJ45 connectors are designed to handle harsh environments.

These products are designed with a rugged housing in either flame-resistant, glass reinforced PBT or die-cast, nickel-plated zinc, both providing resistance to chemicals and UV radiation. Double-bayonet locking provides IP67 resistance to ingress of dust and water. The connectors also provide durability for various applications.

They allow designers to place external ports on their equipment that will be installed in locations both indoors and outdoors.

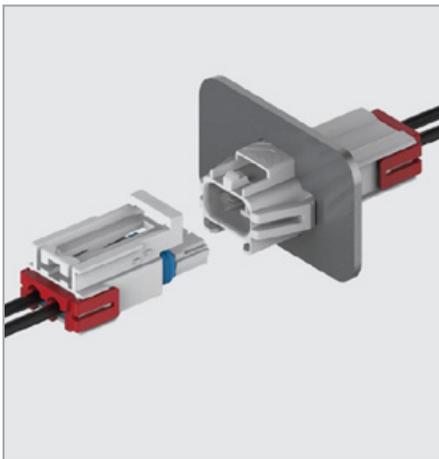
Features

- Wire-side components maintain environmental ratings when engaged with panel mounted version
- Bayonet locking provides reliable sealing in harsh environments
- RJ45 connections that are rated to CAT5E
- UV-resistant
- Chemical resistant
- Sealed IP67 solution in metal or plastic

Applications

- Industrial data network systems
- Automation systems
- Renewable energies
- Test devices and instruments
- Fibre to the home/fibre to the antenna
- Process control

TE CONNECTIVITY POWER VERSA-LOCK CONNECTOR SYSTEM



[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

We know the market demands ergonomic, higher IP rated connectors that also help reduce assembly processes and come in a miniaturised design. Understanding these needs has brought their engineers to design the Power Versa-Lock connector system. TE's solutions portfolio that offers a high performing, wire-to-wire power and signal solutions with IP67 rated protection from water and dust.

Features

- IP67 rated protection against water and dust
- Perimeter seals offer low mating force for enhanced ergonomics
- 5mm centreline provides a compact and space-saving design
- 15A max. current rating and 600VAC voltage rating provides a solution for high power application needs
- Cap and plug housings meet UL 94-V0 requirements to meet industry safety standards
- Optional TPA (for use with unsealed version) and back covers (for use with sealed version) help ensure proper assembly
- Tab and receptacle contact system helps provide higher reliability
- Mounting clip helps reduce connector movement in high vibration applications
- Patented twist and lock cap offering designed to allow moisture to drip away from the connection in refrigeration applications

Applications

- Robotic lawn mowers
- Pressure washers
- Refrigeration
- Indoor/outdoor/speciality lighting
- Robotics and conveyors
- HVAC
- Washing machines

TE CONNECTIVITY SFP-DD CAGES AND CONNECTORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) Small Form-Factor Pluggable Double Density (SFP-DD) products for I/O interconnect include cages, surface mount connectors and cable assemblies. This product portfolio was developed in accordance with the SFP-DD Multi-Source Agreement (MSA) specification. SFP-DD is one of the smallest industry standard small form-factors today which enables data centre systems to operate at doubled port density with faster data transfer rates. The SFP-DD connectors and cages are also mechanically interoperable with module components produced by different manufacturers. They can free up more space in application as compared to QSFP28/QSFP56 solution.

Features

- 2-lane interconnect with higher density and better signal integrity than SFP28/56 - concept leverages QSFP-DD Surface Mount Technology (SMT) design. Compared to SFP28/SFP56 solutions, SFP-DD cages and connectors provide double the density and double the speed, reaching up to 112Gbps via two channels
- Backward-compatible
- Space savings: frees up more space of PCB and faceplate as compared to QSFP28/QSFP56 solution. One port with upgraded functions: extends to two channels 28G NRZ and 56G PAM-4
- Industry-leading thermal management: offers superior thermal management with TE's innovative thermal bridge technology
- Offers design flexibility with customised solutions

Applications

- Switches
- Servers
- Routers
- Storage equipment
- Base stations
- Other applications that require high speed input/output data transmission

TE CONNECTIVITY TINEL RING SWEPT ELBOW BACKSHELLS (TXR)



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

TE Connectivity's (TE) Tinel ring swept elbow backshells (TXR) are suited for screened cables in a wide range of military and aerospace applications. As content continues to grow in military and aerospace systems, customers look for improved efficiency. TE's TXR swept elbow backshells offer designers the potential for up to 20% weight savings over traditional backshells.

TE is complementing its series of banding backshells (BT) with a Tinel backshell version (TXR). The TXR swept elbow backshells provide constant internal radius and a smooth internal bore using investment casting. They are designed to allow for uncoupling during repairs, which helps reduce damage to the boot, resulting in a simple and fast termination option.

Features

- Weight savings
- Up to 20% over the traditional right angle design
- Multiple configurations
- Multiple shell sizes and plating finishes available
- Easy installation
- Simple and fast termination solutions
- The spin coupling nut allows for improved reliability
- High-reliability solutions

Applications

- Aerospace
- Defence

Connectors

TE CONNECTIVITY USB TYPE-C (USB 4 GEN. 3) CONNECTORS



TE Connectivity's USB Type-C (USB 4 Gen. 3) receptacle connectors provide the premium performance required by next-generation applications like mobile phones and notebooks in AI and IoT that demand data transfer speeds up to 40Gbps and reliable charging functionality.

Features

- Excellent Signal Integrity (SI) performance in harsh environments (from low to high frequency)
- Transfers data up to 40Gbps
- Excellent structure strength for a more robust connector shell
- Manufactured with an advanced insert molding process that helps avoid pin warping issues
- Supports resistance to damage and connection integrity during the customer assembly process
- Backward-compatible with Thunderbolt 3, USB 3.x and USB 2 connectors

Applications

- Mobile phones
- Notebooks
- Tablets
- Peripherals (monitors, displays, projectors, printers)
- Gaming or home entertainment (TV, VR/AR devices)
- Computing, PC or SoC design

[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 



C&K PTS847 SERIES 4.6MM X 2.2MM SMT SIDE ACTUATED TACT SWITCH



[VIEW PRODUCT DETAILS](#) 

With high end consumer and medical devices requiring small and compact size, there is a need to get smaller and reliable switches to adapt to the design in customers' limited PCB space. So the PTS847 series is an important addition to C&K portfolio in order to serve applications such as sports watches and hearing aids, as well as the latest IoT portable devices.

The PTS847 provides side push actuation in the edge mount configuration and a small footprint in a choice of two actuation forces (160gf and 350gf) helping easier customer integration into a wide range of customer designs.

Features

- 4.6mm x 2.2mm x 2.6mm package size
 - > (Printed circuit board edge mounting being as low as 0.95mm)
- Side push actuation
- SMT termination with or without L-shape shield
- Hard and soft actuator options
- 160gf and 350gf options
- 200k life cycles
- Standard industry size, available for multiple design options in wearable device, medical device and IoT applications
- Side push and edge mounting provides customer on-board PCB footprint saving
- Fully integrated into reflow soldering standard processes, meaning time and costs are reduced for the end equipment manufacturer
- Reduces cost and integration difficulties associated with different designing preference

- Offering only the most common versions used by the market allows C&K to keep tight controls on design
- Reliability for your application, meaning less chance of costly repair or rework charges

Applications

- Headphones
- Health monitoring
- Gaming consoles
- Headsets
- Sports watches
- Black boxes for vehicle
- Home appliances

C&K ZMV SNAP-ACTING SWITCH



[VIEW PRODUCT DETAILS](#) 

The ZMV snap-acting switch has a special pin plunger whereby actuation is not limited to just one direction.

Features

- Adequate stroke setting for reliable and precision ON or OFF switching
- Internal spring design return - ensures the actuator is restored to the same position every time
- High contact reliability to support from low range switching loads
- Ideally suited for signal to power from automotive to industrial applications
- IP67, with potted wires. Designed for rugged applications
- Available in pin plunger, lever and wire harness versions making integration into customer designs easier
- RoHS compatible and compliant, enables the customer to use on new designs requiring ROHS compliance
- Direct compatibility with competitors like Omron D2HW
- UL and ENEC approved

Applications

- Automotive - door or latch detection
- Industrial - oil and chemical industries in pumps
- Home appliances - propane stoves, HVAC, washing machines
- IoT devices
- Medical devices

OMRON D2GW SERIES SEALED ULTRA SUBMINIATURE BASIC SWITCH



[VIEW PRODUCT DETAILS](#) 

The industry's smallest class * (8.3mm x 6.5mm x 5.3mm) with a volume ratio that is 62% of conventional models (D2AW).

Features

- A fixed slit saves space on customer units and contributes to a slim form
- A sliding structure delivers quiet operation
- Micro-load support thanks to high contact reliability
- Versatile actuator variation enables support for various operating bodies (shapes, materials, operations)
- A bilaterally symmetrical shape contributes to simpler designs
- Press-fit terminals enable solder-less contact

* Based on Omron investigation in April 2021

OMRON G9KA PCB POWER RELAYS



[VIEW PRODUCT DETAILS](#) 

The G9KA is a high power and high temperature type power relay with 800VAC 200A breaking and ultra-low contact resistance.

Features

- 800VAC/200A breaking
- Ambient temperature +85°C
- High impulse withstand voltage, 10kV
- Contact gap $\geq 4\text{mm}$ (applied to VDE0126)
- Low initial contact resistance $\leq 0.2\text{m}\Omega$ (when 200A of current is applied)

Applications

- Power conditioner inverters
- Industrial inverters
- UPS

[BUY NOW](#) 

TE CONNECTIVITY ALCOSWITCH PBES16 PUSHBUTTON EMERGENCY STOP SWITCH



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) ALCOSWITCH PBES16 series pushbutton emergency stop switch is offered as an illuminated and non-illuminated switch. This series has multiple lighting options, agency approvals, and meets IEC 60947-5-1 and IEC 60947-5-5 standards. These switches are offered with two different actuator button styles. The PBES16 series has a 20N actuation force for ruggedised applications to avoid accidental actuations and is also IP65 rated to withstand harsh environments.

Features

- Solder to wire or quick connect/disconnect terminals
- Simple easy mounting
- IP65 rated
- IEC 60947-5-1 and IEC 60947-5-5
- 16mm mounting hole
- Gold plating
- Illuminated and non-illuminated
- UL and TUV agency approval
- LED and incandescent
- High actuation force

Applications

- Robotics
- Escalators
- Process machinery
- Medical equipment
- Factory automation

TE CONNECTIVITY OJS POWER MINIATURE PCB RELAY



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) OJS Power Miniature PCB 10A/16A relays are high performance power PCB relays whose size is compatible with the existing TE OJ relay, but the rated current is much higher. The design of these new relays is small in size, compact and saves space on the board for customer designs, along with the high performance 16A contact rating that will simplify the design circuit and make the product more stable. OJS 10A/16A Power PCB relay are suitable for lighting controller, power supplies, smart plug, industrial control, and appliance applications.

Features

- Improves stability in the product
- 1 pole 10A/16A, 1 form A (NO)
- 10A rating with sensitive coil 200mW
- Small size (18.2mm x 10.2mm x 14.8mm)
- 4000Vrms coil to contact dielectric strength
- Product in accordance with IEC 62368-1

Applications

- Smart plugs
- Light control switches
- Power supplies for PCs or servers
- Appliances
- Industrial control

TE CONNECTIVITY POTTER & BRUMFIELD THREE PHASE SOLID STATE RELAYS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's (TE) Potter & Brumfield Solid State Relays (SSR) are featured in industrial applications where silent, fast and long electrical life in switching is required. The SSR3 series adds a three phase relay option to our SSR range of products, which is three individual single phase solid state relays packaged in a single housing, having a common input, to energise each SSR simultaneously. With load ratings ranging from 10A to 75A at 480VAC, the SSR3 series has a unique wide range of part numbers including its AC and DC input options. This offers customers an option to reduce the wiring complexities, assembly time reduction and space utilisation especially in applications where the three phase loads are to be operated.

Features

- Addition of panel mountable option expands product portfolio
- Ability to switch various load options
- Reduces assembly time

Applications

- Blow molding machines
- Coffee machines
- Conveyor trollies
- Industrial furnaces
- Motor control
- Plastic injection machines

TE CONNECTIVITY SCHRACK FORCE GUIDED RELAYS



[VIEW PRODUCT DETAILS](#) 

SCHRACK force guided relays are used in safety circuits in combination with light curtains, interlock switches, and emergency stop switches to control outputs. These are used to expand outputs for safety relay modules and safety controllers. In the design of the force guided relays, special importance was attached to the switching of low loads by the monitoring circuit. TE Connectivity (TE) has developed comprehensive documentation of forced guided relays which accelerates the development process for safety controls and application notes help to point out possible error sources.

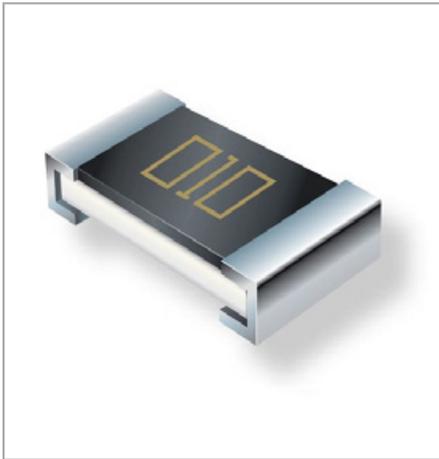
Features

- Multiple contact configurations up to 5 NO (form A) and up to 3 NC (form B) in different form factors
- Different pin layouts and version with selective contact loading to enable higher voltage ratings
- Different plating options such as standard plating AgSnO₂ or high-performance gold plating AgSnO₂ + 0.2µm Au
- Standard and sensitive coil options for longer lifetime and improved heat dissipation
- Different packaging options such as box packaging and tube packaging

Applications

- Elevators
- Rail
- Machinery
- Safety circuits in combination with light curtains
- Interlock switches
- Emergency stop switches to control outputs

BOURNS CFN-A SERIES AEC-Q200 COMPLIANT METAL FOIL CHIP RESISTORS



[VIEW PRODUCT DETAILS](#) 

Bourns has introduced its AEC-Q200 compliant Model CFN-A metal foil chip resistor series. This surface mount series helps strengthen the already broad range of surface mount chip resistors offered by Bourns.

The Model CFN-A metal foil chip resistor series is produced by using a metal foil resistive element mounted on a ceramic substrate with excellent heat conductivity.

The CFN-A series is available in four different footprints: 0402 (1005 metric), 0603 (1608 metric), 0805 (2012 metric) and 1206 (3216 metric).

The metal foil resistive element of these chip resistors provides very low inductance, low noise, excellent reliability and very low resistance values down to five milliohms. The low resistance value makes them ideal for current sensing in consumer and telecommunication electronics and industrial automation applications.

This family complements the other circuit conditioning components available from Bourns such as power inductors and rectifier diodes.

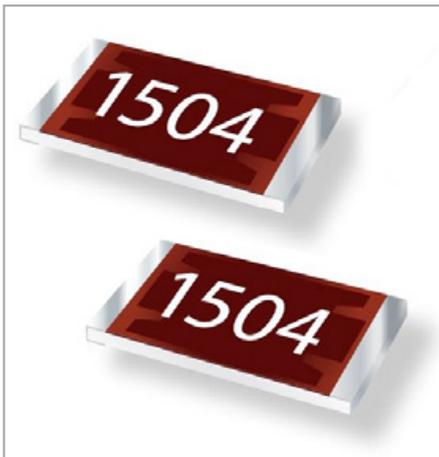
Features

- Metal foil
- High power density
- High reliability and stability
- RoHS compliant and halogen free
- AEC-Q200 compliant
- Automotive grade

Applications

- Current sensing
- Power supplies
- Stepper motor drives
- Input amplifiers

BOURNS CHV-ST AND CHV-A SERIES HIGH VOLTAGE CHIP RESISTORS



[VIEW PRODUCT DETAILS](#) 

Two high voltage chip resistor series, the model CHV-ST is a standard high voltage thick film chip resistor series and the Model CHV-A automotive grade high voltage chip resistor series, which is AEC-Q200 compliant, UL 1676 listed, and UL/IEC 60950 and 60065 compatible. These new surface mount series help strengthen the already broad range of surface mount chip resistors offered by Bourns.

The model CHV-ST and model CHV-A series are available in five different footprints from 0603 (1608 metric) up to 2512 (6432 metric) and have been designed to operate with higher voltages ranging from 200V for the 0603 size to 3kV for the 2512 size.

These resistors are made using a robust thick film element printed onto a ceramic substrate. These model families complement the other circuit conditioning components available from Bourns such as power inductors and rectifier diodes.

Features

CHV-ST series

- Thick film
- High working voltage
- Wide resistance range
- RoHS compliant

- UL/IEC 60950 and 60065 compatible
- UL 1676 listed
- Automotive grade

CHV-A series

- Thick film
- High working voltage
- Wide resistance range
- AEC-Q200 compliant
- RoHS compliant

Applications

- Higher voltage applications
- Consumer electronics
- Smart meters
- Power supplies
- Lighting

BOURNS ISOM3, ISOM5 AND ISOM8 SERIES ISOMOV™ HYBRID PROTECTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Bourns has introduced its lineup of IsoMOV™ technology hybrid overvoltage surge protectors. With their integrated gas discharge tube structure and extended temperature range, the IsoMOV™ hybrid protection components promise better reliability and longer life in certain harsh environments. The IsoMOV™ component family continues Bourns' legacy of quality, innovation and design in overvoltage surge arrestors and sets a new standard of robustness in each size class. The lineup includes three series of devices; model IsoM3, IsoM5 and IsoM8. With nominal surge ratings of 3kA, 5kA and 8kA, these revolutionary new protectors offer performance usually found in larger traditional MOV devices.

Using proprietary computer-aided design techniques to model performance, Bourns engineers have combined its revolutionary EdgMOV™ technology, which greatly reduces typical MOV edge failures, with a unique integrated structure to create a device with the equivalent function of a discrete MOV and GDT in series. The result is a familiar radial disk MOV package that is only slightly thicker and of substantially smaller diameter than similarly rated conventional devices.

Features

- AC voltage ratings 175V to 555V
- Nominal surge ratings 3kA/5kA/8kA
- -40°C to +125°C operation
- Low leakage current
- Low capacitance and insertioloos
- Stable performance throughout life
- Design kit available for quick-turnaround testing
- UL listed UL 1449 Type 4 CA
- RoHS compliant

Applications

- Critical AC power applications
- White goods
- Motor drives
- AC inverters
- LED lighting and signage
- Surge Protective Devices (SPDs)

BOURNS PER21 AND PER23 SERIES LONG LIFE INCREMENTAL RING ENCODERS



[VIEW PRODUCT DETAILS](#) 

In line with Bourns' commitment to provide products with innovative designs, superior quality and exceptional value, Bourns Sensors and Controls Product Line has introduced the Model PER21 and PER23 long life incremental ring encoders. The Model PER21 and PER23 are designed for use in professional audio and lighting applications, low/medium risk medical and laboratory equipment, industrial automation controls and any other applications where a menu select encoder is required. These models features a ring interface that allows illumination or installation of other components in the centre.

Features

- Incremental encoder
- Through-hole mounting style
- 50,000 rotational cycle rating
- -10°C to +60°C operating temperature range
- Haptic detent feedback
- RoHS compliant

Applications

- Professional audio equipment
- Professional lighting consoles
- Consumer white goods
- Low/medium risk medical and diagnostic equipment
- Test and measurement equipment
- Communications equipment
- Laboratory equipment

BOURNS PER28/35/56 SERIES LONG LIFE INCREMENTAL RING ENCODERS



[VIEW PRODUCT DETAILS](#) 

In line with their commitment to provide products with innovative designs, superior quality and exceptional value, Bourns has introduced the model PER28, PER35 and PER56 long life incremental ring encoders.

Ranging in size from 28mm (model PER28), 35mm (model PER35) and 56mm (model PER56), these low profile encoders are designed for use in professional audio and lighting applications, low/medium risk medical and laboratory equipment, industrial automation controls and other applications where a menu select encoder is required. These models feature a ring interface that allows illumination or installation of other components in the centre.

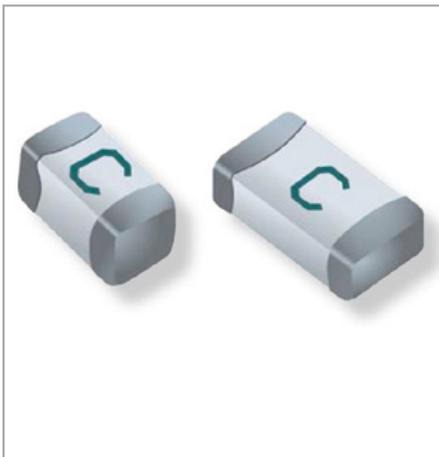
Features

- Low profile incremental encoders
- THT mounting style
- 50,000 rotational cycle rating
- Haptic detent feedback
- RoHS compliant

Applications

- Professional lighting consoles
- Consumer white goods
- Low/medium risk medical and diagnostic equipment
- Test and measurement equipment
- Communications equipment
- Laboratory equipment
- Industrial automation controls

BOURNS SF-0603SA-M AND SF-1206SA-M SERIES AEC-Q200 COMPLIANT SMD FUSE



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Bourns has introduced two families of AEC-Q200- equivalent compliant SMD fuses to complement its already successful line of SinglFuse™ SMD fuse products.

The Model SF-0603SA-M and SF-1206SA-M series utilise Bourns' popular multilayer ceramic design for enhanced voltage and current handling capabilities in small 0603 and 1206 package sizes. Both families are fully compliant with Bourns' internal AEC-Q200- equivalent test procedures to help ensure performance robustness in certain harsh environments including automotive, industrial, low to medium risk medical, telecom and battery management systems applications, among others.

Bourns continues to broaden its portfolio of SinglFuse™ SMD fuses to address the growing need for effective overcurrent protection in a variety of applications including transportation, telecom and networking equipment, computing and server storage, portable memory, handheld electronics and gaming systems, smart appliances, battery charging and power management, robotics and industrial automation.

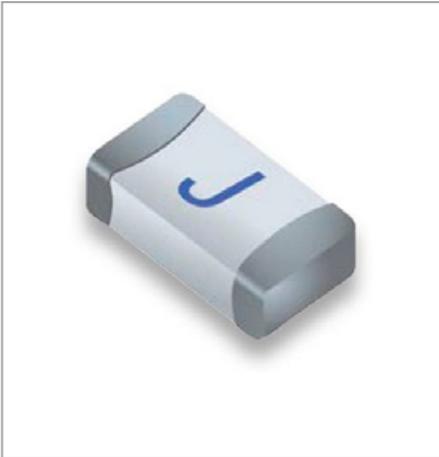
Features

- Slow blow fusing speed
- EIA 0603 and 1206 footprint
- AEC-Q200-equivalent compliant
- UL 248-14 listed
- RoHS compliant and halogen free
- Automotive grade

Applications

- Industrial
- Medical (low to medium risk)
- Telecom
- Battery Management Systems (BMS)

BOURNS SF-1206F-M SERIES FAST ACTING SMD FUSE FAMILY



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Bourns has introduced the Model SF-1206F-M series fast acting SMD fuses to complement its already successful line of SinglFuse™ SMD fuse products.

The Model SF-1206F-M model family utilises Bourns' popular multilayer ceramic design for enhanced voltage and current handling capabilities in a compact 1206 package size. This family is intended for use in a variety of consumer, industrial and battery protection applications including set-top boxes, LED lighting, power tools, industrial controllers, rechargeable battery packs and Battery Management Systems (BMS), among others.

Bourns continues to broaden its portfolio of SinglFuse™ SMD fuses to address the growing need for effective overcurrent protection in a variety of applications including transportation, telecom and networking equipment, computing and server storage, portable memory, handheld electronics and gaming systems, smart appliances, battery charging and power management, robotics and industrial automation.

Features

- Single blow fuse for overcurrent protection
- Fast acting fusing speed
- EIA 1206 footprint
- UL 248-14 listed
- RoHS compliant and halogen free

Applications

- Cellphones
- Rechargeable battery packs
- Set-top boxes
- Industrial controllers
- Battery Management Systems (BMS)
- LED lighting
- Power tools

BOURNS SRF3225TABM AND SRF3225TAFD SERIES 1210-SIZE AUTOMOTIVE GRADE



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

The Bourns Magnetics SRF3225TABM and SRF3225TAFD 1210-size automotive grade common mode chip inductors are constructed with a ferrite core and are bifilar-wound delivering compact size, shielded construction for low radiation, and high impedance over a broad frequency range to suppress Electromagnetic Interference (EMI) coming into or leaving the system. The 0.3mm minimum height sidewall terminal at each end of the inductor core helps enhance the component's mechanical strength after it is assembled on the board.

The SRF3225TABM and SRF3225TAFD series are AEC-Q200 compliant for high reliability and high durability applications which makes them ideal for noise suppression in 100Base-T1 Ethernet, CAN and CAN-FD Class II/III, consumer, industrial and other electronics.

Features

- Bifilar-wound
- Shielded construction for low radiation
- High impedance, wide EMI suppression frequency range
- RoHS compliant and halogen free
- AEC-Q200 compliant
- Automotive grade

Applications

- Noise filters
- EMI suppression for data and signal lines
- System CANBus
- CAN FD Class II/III
- Ethernet 100 Base-T1

BOURNS SM91519L AND SM91527L SERIES BMS SIGNAL TRANSFORMERS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Bourns Magnetics offers the Model SM91519L and SM91527L BMS signal transformers. These single channel, reinforced insulation transformers include common mode chokes for noise rejection in BMS applications.

These models work well with the NXP Model MC33771C series and Analog Devices model LTC6804/681X series. These BMS signal transformers offer a working voltage of up to 1,500VDC and a hi-pot isolation voltage of up to 6,400VDC (SM91519L) and 7,640VDC (SM91527L) with an extended operating temperature range of -40°C to +125°C.

The solid design of the SM91527L transformer can help customers pass the partial discharge test per IEC 60664 up to 2,250V and the impulse voltage test up to 12kV (1.2µS/50µS).

Features

- Reinforced insulation per IEC 62477-1, IEC 60664-1 and IEC 62368-1
- UL recognised: file number E515965 per UL62368-1
- Up to 1,500VDC working voltage and hi-pot up to 6,400VDC (SM91519L) and 7640VDC (SM91527L)
- Creepage distance: 15mm minimum; clearance distance: 14mm minimum
- Supports serial daisy chain/Iso SPI communication
- Developed for use with the NXP Model MC33771C series and Analog Device model LTC6804/681X series
- RoHS compliant

Applications

- Battery management systems
- Energy storage systems

BOURNS SRP03/SRP04/SRP05/SRP06-LAB SERIES DESIGN KITS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Bourns Magnetics offers the Model SRP03-LAB, SRP04-LAB, SRP05-LAB and SRP06-LAB low profile shielded power inductor design kits as part of our continuing effort to support the design community with easy access to samples for use in designer prototypes. These design kits contain inductors that provide engineers with a variety of inductances, rated currents and sizes for quick-turn prototype testing. The Bourns® model SRP series power inductors are ideal for power management and EMI suppression applications in consumer, industrial, telecom and many other electronic devices.

BOURNS SRP6530A SERIES AEC-Q200 COMPLIANT HIGH CURRENT SHIELDED POWER



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

The AEC-Q200 compliant Model SRP6530A series high current shielded power inductors from Bourns have been designed to meet today's high current density and high temperature requirements of various electronic applications. This inductor series is manufactured with a metal alloy powder core featuring low DC resistance, high heating/saturation current, low buzz noise, excellent temperature stability and shielded construction for low magnetic field radiation.

The Model SRP6530A series has a high temperature rating with an operating temperature range of -55°C to +155°C and is well suited for DC-DC converters and power supplies in consumer, industrial, and telecom electronics applications in which higher inductor reliability may be required.

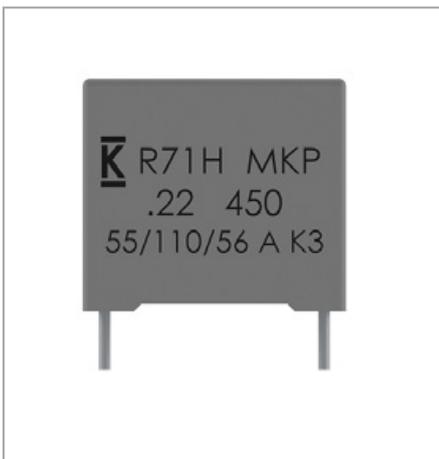
Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant and
- Halogen free

Applications

- DC-DC converters
- Power supplies in consumer, industrial, and telecom electronics

KEMET R71 SERIES +125°C SINGLE METALLISED POLYPROPYLENE RADIAL FILM



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

The R71H is constructed of metallised polypropylene film with radial leads of tinned wire. The radial leads are electrically welded to the metal layer on the ends of the capacitor winding. The capacitor is encapsulated in a self-extinguishing solvent resistant plastic case with thermosetting resin material meeting UL 94V-0 requirements. Automotive grade devices meet the demanding Automotive Electronics Council's AEC-Q200 qualification requirements.

Features

- Voltage range: 450VDC to 630VDC
- Capacitance range: 0.033µF to 22µF
- Lead Spacing: 10mm to 27.5mm
- Capacitance tolerance: ±10%, ±20%, ±5% (on request)
- Climatic category: 55/110/56 IEC 60068-1
- Operating temperature range of -55°C to +125°C
- RoHS compliance and lead-free terminations
- Tape & reel packaging in accordance with IEC 60286-2
- Self-healing

Applications

- Typical applications include power factor correction and pulse applications
- Not suitable for across-the-line application (see suppressor capacitors)

KEMET SCR XV SERIES COMMON MODE AUTOMOTIVE GRADE COILS



The KEMET SCR-XV coils are common mode chokes with a wide variety of characteristics for automotive and harsh environment industrial application. These toroidal coils are designed with our proprietary high permeability ferrite S15H cores and are useful in various noise countermeasure fields.

Features

- Proprietary S15HT ferrite material
- High rated voltage up to 1,000V AC-DC
- Operating temperature range from -40°C up to +120°C
- High permeability
- High impedance
- UL 94V-0 flame retardant rated base and cap
- AEC-Q200 qualified

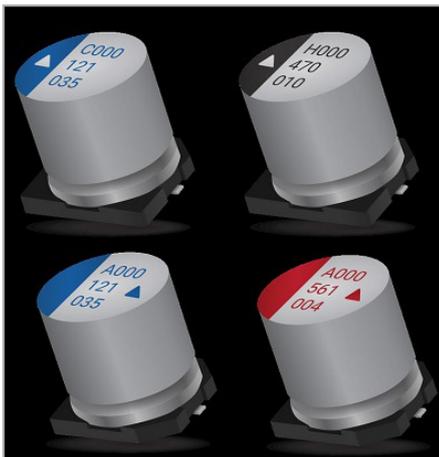
Applications

- On-board charger for EV/PHEV
- Wireless charging systems with 85kHz
- Medium power drives for steering, air conditioning and mild hybrid 48V systems
- High voltage automotive and harsh environment industrial EMI filtering

[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

KYOCERA AVX ALUMINIUM ELECTROLYTIC CAPACITORS



The Kyocera AVX team has added aluminium chip capacitors to its already-extensive portfolio of high-performance electrolytic capacitors. These six series are especially designed to meet increased market demand for compact and cost-effective aluminium capacitors that exhibit high capacitance and voltage characteristics, very low ESR, and high endurance, and are optimised for use in a wide range of high-density and high-temperature consumer and industrial electronics applications.

Features

- SMD V-chip (classic, polymer, hybrid)
- Super low ESR
- RoHS compliant
- High voltage, long life

Applications

- Computers
- Telecom
- Industrial
- Gaming
- DC-DC converters

[VIEW PRODUCT DETAILS](#)

[BUY NOW](#)

PANASONIC ERJH SERIES RESISTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

High quality chip resistors meeting the requirements of next-gen. product designs are essential. For this very reason, Panasonic Industry has introduced its thick-film ERJH series of high temperature resistors.

Conventional resistors in the market are currently covering a temperature range of up to +155°C. This is sufficient for many applications in the automotive, industrial or building automation sector. However, there is a clear trend towards a higher temperature tolerance – especially in the field of automotive engineering the demand is significantly increasing. Panasonic Industry's ERJH series has undergone various optimisation efforts regarding material and manufacturing procedures in order to reliably withstand higher temperatures.

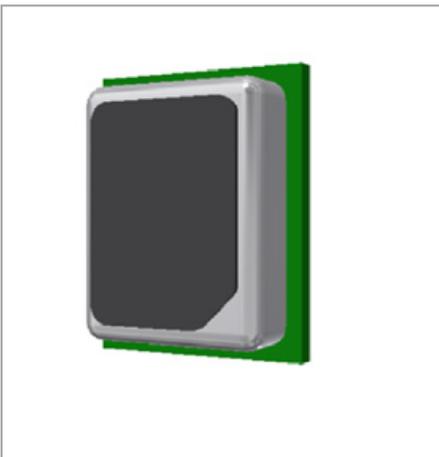
The ERJH thick film resistors series uniquely qualifies for particularly high power applications. The derating in these resistors starts from +105°C compared to +70°C in conventional resistors. This means that the resistor unfolds its full power up to +105°C before the power starts to derate – reaching its minimum only at an unrivalled +175°C.

This is not only remarkable in terms of sheer heat tolerance but also clearly serves the trend for downsizing the circuit board: instead of resorting to larger resistors to counter the derating effects, the high-temp ERJH series is proven to guarantee 100% power at up to +105°C while saving precious PCB space.

The ERJH series is available as standard, high precision, low resistance, and anti-surge resistors, covering a wide resistance value range from 1Ω to 300KΩ.

As relevant automotive component it comes RoHS, REACH and AEC-Q200 certified- and renders the ideal choice for engine ECUs, DC-DC inverters, converters, lighting applications, HEV electronics and also many other automotive and non-automotive innovations.

PUI AUDIO AMM-2742/DMM-4326/AMM-3742-T-WP-R SERIES WATERPROOF MEMS



[VIEW PRODUCT DETAILS](#) 

PUI Audio introduced three compact, waterproof MEMS microphones, featuring super-wide frequency responses between 20Hz and 20,000Hz and IP57 rating with a waterproof mesh pre-applied.

Features

AMM-2742-T-WP-R series

- Tightly controlled ±1dB sensitivity
- IP57-rated with waterproof mesh pre-applied

DMM-4326-T-WP-R series

- Digital MEMS microphone with PDM output
- IP57-rated with waterproof mesh pre-applied

AMM-3742-T-WP-R series

- Popular 3.76mm x 2.95mm size
- IP57-rated with waterproof mesh pre-applied

SCHURTER DKIV-1 HIGH CURRENT CHOKES



[VIEW PRODUCT DETAILS](#) 

SCHURTER expands its range of current-compensated chokes for printed circuit board mounting, to include a series for 1-phase high-current applications. Due to the vertical design, the DKIV-1 series sports a significantly smaller footprint. The chokes are available with a ferrite or nanocrystalline core for rated currents from 10A to 50A. The open design makes the chokes particularly compact and lightweight.

The DKIV-1 series is designed for 1-phase applications at rated currents from 10A to 50A. Even at the max. rating, the vertical choke requires only a small footprint on the PCB, thus allowing a compact design with high performance. The compact and lightweight current-compensated chokes are through-hole mounted.

They are ideal for multistage filter applications, where the combination of a vertical choke (DKIV) with a horizontal choke (DKIH) reduces the mutual interference of the magnetic fields of the individual chokes.

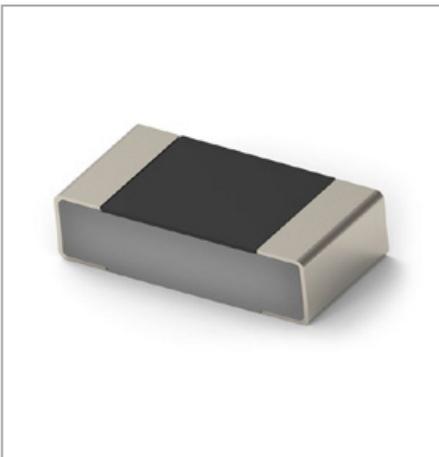
Features

- Compact size and light weight
- Small footprint on PCB
- Open design optimises heat dissipation
- Ferrite or nanocrystalline ring cores

Applications

- Frequency inverters for automation, photovoltaic or energy storage
- Charging stations for e-vehicles
- UPS systems

TE CONNECTIVITY METAL STRIP CURRENT SENSING TLRP RESISTORS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity (TE) offers AEC-Q200 qualified high power metal strip resistors for current sensing positions. TLRP resistors have a special metal resistive element combined with suitable barrier layers beneath the solder to prolong terminal life. These resistors are particularly useful for power management with DC-DC converting and charging applications, as well as adaptors within SWPS applications.

Features

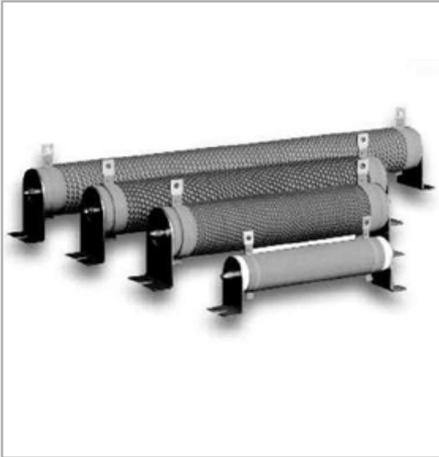
- AEC-Q200 qualified
- Low inductance <5nH
- Power dissipation capability up to 3W
- Available in three case sizes (12:06/20:10/25:12) 1% tolerance preferred stocking package/availability down to 0.5% tolerance
- Sulphur resistant: unaffected by sulphur environments

Applications

- Audio devices
- Telecommunications
- Automotive
- Lighting
- Power management
- SWPS (DC-DC converters, chargers, adaptors)

[BUY NOW](#) 

TE CONNECTIVITY TE SERIES HIGH POWER WIRE WOUND RESISTORS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity (TE) is a leading supplier of standard and custom-designed power resistors for industrial, control and general-purpose applications. The high power wire wound resistors range of flameproof coated tubular ceramic core resistors use both standard and edge wound (corrugated) winding methods to improve power handling capability. They are designed for heavy duty machinery, electrical equipment, motor control, dynamic braking, equipment discharge, load test simulation, large electrical and production machinery requiring stability and reliability.

Features

- Up to 2,500W power rating in free air
- Flameproof construction: UL94V coating
- RoHS compliant
- Smooth and corrugated winding availability
- Custom terminations/leads available
- Available at 5% and 10% tolerance

Applications

- Dynamic braking
- Equipment discharge
- Load test simulation
- Large electrical and production machinery

VISHAY MKP1847C AC FILTERING FILM CAPACITORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

The Vishay Intertechnology series of metallised polypropylene AC filtering film capacitors is optimised for high humidity environments. Vishay Roederstein MKP1847C AC filtering devices withstand demanding Temperature Humidity Bias (THB) testing -40°C, 93% relative humidity for 56 days at rated voltage without altering their electrical characteristics.

- Designed to ensure extremely stable capacitance and ESR values over a long service life under harsh environmental conditions during operation
- Compared to previous-generation devices, the MKP1847C AC filtering series offers higher humidity robustness at a lower cost, while maintaining the same footprint

Features

- Withstands THB testing -40°C, 93% relative humidity for 56 days at rated voltage
- Wide capacitance range from 1µF up to 70µF, with tolerance down to ±10%
- Rated voltages of 230VAC, 250VAC, 275VAC, 310VAC and 350VAC
- Low self-inductance of <1nH per mm of lead spacing
- High peak current capabilities up to 750A
- High RMS current up to 26A
- Offered in a flame-retardant plastic case with a resin seal
- High operating temperature to +105°C

Applications

- Input and output filtering in UPS systems, renewable energy inverter grid interfaces, and welding equipment

VISHAY IHLP® COMMERCIAL INDUCTORS HIGH TEMPERATURE (+155°C) SERIES



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Vishay Intertechnology's commercial IHLP® low profile, high current inductor that is the industry's first composite inductor in the 19mm by 19mm by 7mm 7575 case size.

- Offers up to 30% lower DCR and up to 35% higher current ratings than devices in the 6767 case size, at a 50% lower cost than devices in the 8787 case
- Optimised for energy storage in DC-DC converters up to 2MHz and high current filtering applications up to the SRF of the inductor
- Packaged in a 100% lead (Pb)-free shielded, composite construction that reduces buzz noise to ultra low levels
- High resistance to thermal shock, moisture, and mechanical shock

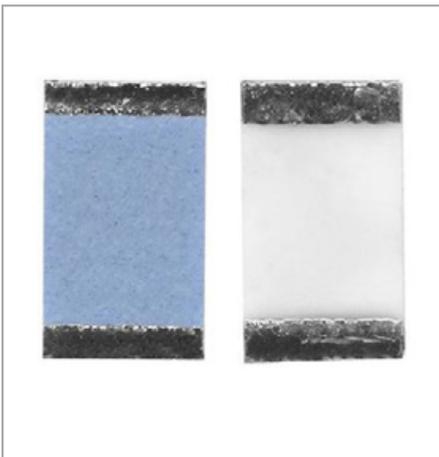
Features

- High temperature rating, up to +155°C
- Shielded construction
- Excellent DC-DC energy storage up to 1MHz to 2MHz. Filter inductor applications up to the SRF (see standard electrical specifications table)
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction

Applications

- Notebook/desktop/server applications
- High current PoL converters
- Low profile, high current power supplies
- Battery powered devices
- DC-DC converters in distributed power systems
- DC-DC converter for Field Programmable Gate Array (FPGA)

VISHAY P2TC HIGH PRECISION THIN FILM CHIP RESISTOR



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Vishay Intertechnology's high precision thin film wraparound chip resistor is designed for industrial, medical, military, and aerospace applications. The Vishay Sfernice P2TC offers a tight TCR of ± 2 ppm/C over wider resistance and temperature ranges and in more case sizes with higher power ratings than competing devices.

- The resistor's specifications exceed the requirements of MIL-PRF-55342G
- The P2TC is optimised for precision applications requiring low noise and high stability over time and temperature

Features

- Tight TCR of ± 2 ppm/C
- Wide resistance range of 100Ω to 3.05MΩ
- Tolerances down to $\pm 0.01\%$
- Available in five case sizes from 0402 to 2010
- Broad temperature range of -55°C to +155°C
- High power rating to 1W
- Very low noise of ≤ 35 dB
- Low voltage coefficient of < 0.01 ppm/V
- Load-life stability of $\pm 0.05\%$ typical for 2,000 hours at +70°C
- RoHS-compliant, halogen-free, and Vishay Green
- Sulphur-resistant per the ASTM B809-95 humid vapour test

Applications

- Instrumentation
- Military and avionics guidance systems
- Load cell electronics in weighing systems
- Operational amplifiers for test and measurement equipment

VISHAY T24 SMD HI-TMP® WET TANTALUM CAPACITORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Vishay Intertechnology offers a series of HI-TMP® surface-mount wet tantalum capacitors with high operating temperatures to +200°C in the compact C case code.

- Offers a smaller size and footprint than equivalent through-hole and overmolded high temperature devices
- Designed to utilise board space more efficiently and deliver increased reliability
- Improved thermal shock capability and longer life eliminate the need to utilise larger through-hole devices in demanding environments

Features

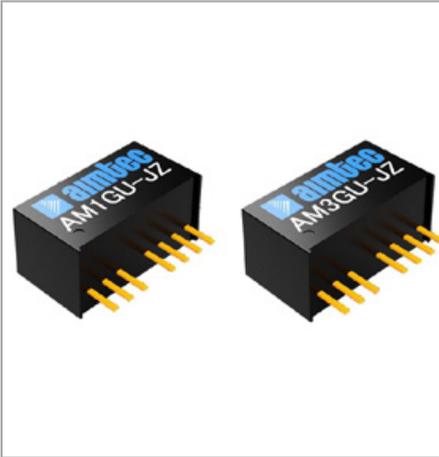
- High operating temperatures to +200°C
- Compact C case code measures 9mm by 7.1mm by 7.4mm
- Tantalum metal case with a glass to tantalum hermetic seal
- Thermal shock capability to 300 cycles
- Longer life of 2,000 hours at +200°C
- +200°C derated voltage ratings of 45VDC and 75VDC, with capacitance values of 33µF and 10µF, respectively
- Capacitance tolerance of ±10% and ±20% standard
- Maximum ESR down to 2.5Ω at 120Hz and +85°C
- RoHS-compliant, halogen-free, and Vishay Green market

Applications

- Timing, filtering, energy hold-up and pulse power applications
- Oil exploration and military and aerospace radar



AIMTEC AM1GU-JZ AND AM3GU-JZ SERIES OF DC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#)

Aimtec has introduced the AM1GU-JZ and AM3GU-JZ series of DC-DC converters, which are Aimtec’s first low power 8:1 ultra-wide input voltage range products. The impressive 4.5VDC to 36VDC input voltage can help power applications with widely varying inputs. These converters can also help reduce the total BOM by replacing multiple DC-DC converters with different narrower input voltage ranges with one cost-effective isolated DC-DC solution.

With 5VDC, 12VDC, 15VDC, ±5VDC, ±12VDC, ±15VDC output voltage options, the AM1DU and AM3DU are well suited for industrial and commercial applications. These products have an impressive operating temperature range of -40°C to +105°C with full power up to +75°C. They also feature an isolation of 3,000VDC and a high MTBF of 1,000,000hrs for improved reliability and system safety. Features such as Output Short Circuit Protection (OSCP), output Over-Current Protection (OCP), and Input Under-Voltage Protection (IUVL) come standard with this family of products.

The AM1GU-JZ and AM3GU-JZ series are ideal for battery operated circuits, IoT, analogue circuits, grid power, LED, instrumentation, industrial controls, communication, and civil applications.

Features

AM1GU-JZ series

- Wide 8:1 input range: 4.5VDC to 36VDC
- Operating temp.: -40°C to +105°C
- Low ripple and noise, up to 100mV(p-p) max.
- Efficiency up to 74%
- Output short circuit, over-current protection, Input under-voltage protection
- Regulated output
- No load power consumption low to 0.12W

- Low ripple and noise, up to 100mV(p-p) max.
- Efficiency up to 79%
- Output short circuit, over-current protection, Input under-voltage protection
- Regulated output
- No load power consumption low to 0.12W

AM3GU-JZ series

- Ultra-wide 8:1 input range: 4.5VDC to 36VDC
- Operating temp.: -40°C to +105°C

Applications

- Power grids
- Instrumentation
- Telecoms
- Industrial

AIMTEC AM1XX-JZ / AM2XX-JZ SERIES 1W AND 2W DC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#)

Aimtec has introduced nine series of 1W and 2W DC-DC converters. These converters have been completely redesigned to enhance performance and offer excellent economies of scale compared to the previous generation while maintaining the same footprint and SIP, DIP and SMD pinouts.

Some of the performance improvements include the following:

- 1 The converters do not compromise the OCP (Over-Current Protection) vs. maximum capacitive load capabilities, thus eliminating the mutual constraints of the OCP, maximum capacitive load and start-up capability. The converters have a maximum capacitive load of up to 2,400uF.
- 2 These DC-DC enclosed solutions improve the light load and full load efficiencies when compared to the previous generation products. This is ideal for application environments like the RS485 or the CAN bus that typically have a light load, typically under 5mA.
- 3 The DC-DC converters are more reliable and have a higher MTBF.

AIMTEC AM2DG-NZ SERIES 2W DC-DC CONVERTERS FOR IGBT DRIVERS



[VIEW PRODUCT DETAILS](#) 

Aimtec has introduced the AM2DG-NZ series. A high-performance power supply unit which offer a dual output channel that can power IGBT gate drivers.

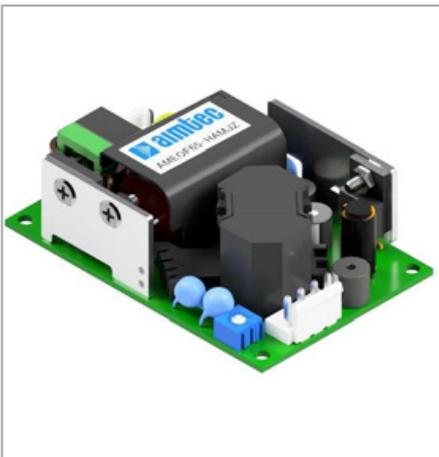
The AM2DG-NZ can accept a conventional input of 12VDC and provide dual output voltages of +15V and -8V that can power the gate drivers. With an extremely wide operating temperature from -40°C to +105°C, this series offers a reliable power source for the IGBT drivers or inverters in high ambient temperature environments. The tested I/O isolation of up to 3,500VAC gives the system great withstand voltage protection.

Additionally, this series offers a compact SIP7 package that can save the circuit designer's PCB board space. With continuous short-circuit protection and a high MTBF of 3,500,000hrs, the AM2DG-NZ is suitable for grid power, EV charging station, instrumentation, PV inverter, industrial motor driver, IGBT gate driver, and AGV applications

Features

- I/O isolation up to 3,500VAC
- SIP 7 multiple manufacturers pin compatible
- Efficiency up to 81%
- Extended temperature range: -40°C to +105°C
- Ultra-low isolation capacitance
- Continuous short-circuit protection

AIMTEC HAMJZ SERIES MEDICAL GRADE HIGH POWER AC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#) 

Aimtec has introduced the HAMJZ series of open-frame and enclosed AC-DC converters. These product series are designed to meet EN60335-1, EN61558-1, EN62368-1, and EN60601-1 standards, thus enabling them to be used in a wide range of applications such as home appliances, medical and industrial applications.

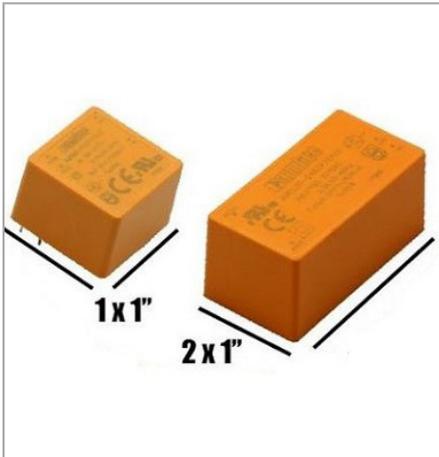
The HAMJZ product family ranges from 65W to 350W and can accept a universal input voltage range of 85VAC to 264VAC and provide 3.3V, 5V, 9V, 12V, 15V, 24V, 36V, 48V and 54V output voltage options.

With a low no-load power consumption, these products are a good fit for equipment that do not need to operate continuously. This family of products can achieve CISPR32 Class B and a ESD contact immunity of ±8KV and an air immunity of ±15KV without external components. The EFT of ±2KV/surge L-L of ±2KV are also standard EMC features for the -HAMJZ family.

The HAMJZ family is designed to meet IEC/EN60601-1 with 2xMOPP along with 4,000VAC of reinforced insulation which is a good fit for medical applications.

Finally, these AC-DC converters have a small footprint and low component height, which offers more flexibility in designing the end product. With a standard JST connector, these products are easy and quick to install as they do not need soldering.

AIMTEC MUST-HAVZ ORANGE AC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#)

Aimtec has introduced its Must-HAVZ lineup of AC-DC converters covering a power range of 3W to 30W, characterised by their orange cases. They have EN/UL 62368-1 information technology equipment and audio/video equipment, EN60335 (household and similar electrical appliances) and EN61558 (power transformers, power supplies, reactors, and similar products) safety standards. This makes the Must-HAVZ ideal for industrial, IoT, home appliances and other related applications.

The AMEL15-277HAVZ and AMEL20-277HAVZ series are also designed to meet EN60601-1 and provide 2xMOPP protection for medical customers. This enables the converters to power a wide range of medical equipment and applications.

The Must-HAVZ lineup can accept an input voltage of 85VAC to 305VAC and provide standard 3.3V, 5V, 9V, 12V, 15V, 24V and 48V output options and can achieve CISPR32/EN55032 Class B and ESD immunity of contact ± 6 KV, air ± 8 KV without external components. To further increase EMC performance of the lineup, they can be paired with external circuits to achieve EFT ± 2 KV/surge L-L ± 1 KV immunity or EFT ± 4 KV/surge L-L ± 2 KV immunity.

Features

- Operating temp.: -40°C to $+85^{\circ}\text{C}$
- Up to 54% smaller
- High efficiency low no load power consumption
- IEC/EN/UL62368; IEC/EN60335; IEC/EN61558

Applications

- Industrial
- IoT
- White goods
- Medical

ARTESYN ADQ600B SERIES 600W QUARTER BRICK DC-DC CONVERTER



[VIEW PRODUCT DETAILS](#)

ADQ600B series quarter-brick isolated DC-DC converters produce a single fully regulated 12V output. Rated at 600W, these converters can deliver up to 50A output current and have no minimum load requirement. They have an input voltage range of 36V to 75V and are primarily designed for use with standard 48V supplies in computing and server applications, as well as regulated 48V supplies in communications equipment.

Features

- 600W continuous power
- Ultra high efficiency: 95.5% typical at half load
- 36VDC to 75VDC telecom input range
- Baseplate optimised for contact cooling or heatsink mounting
- Trim -20% V to $+10\%$ V out
- Open frame version optimised for air cooling
- Low ripple and noise
- Fixed switching frequency
- High capacitive load capability
- Pre-bias start-up capability
- High reliability
- RoHS3.0 (2011/65/EU)
- UL94 V-0 materials
- DOSA footprint compliant
- PMBus Rev. 1.2 compliant
- Two year warranty (consult factory for extended terms)

ARTESYN AGQ500 SERIES QUARTER-BRICK ISOLATED DC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#)



The AGQ500 series quarter-brick isolated DC-DC converter provides a single, regulated and low noise output. The AGQ500-48S50 has a 50V/10A output. It has a telecom input range of 3VDC to 75VDC and is designed primarily for use with standard 48V telecommunications equipment supplies. The converter's main application area is in low power and Remote Radio Head (RRH) telecommunications applications.

Rated at 500W and with an ultra high conversion efficiency of >95% at half load, the converter can operate over an ambient temperature range of -40°C to +85°C, continuing to deliver full power up to a baseplate temperature of +100°C. The output voltage can be trimmed from 25VDC to 57VDC to meet a broad range of application needs and there is no minimum load requirement. The conversion technology employs 340kHz fixed-frequency switching to help minimise external EMI filtering requirements.

Based on a high power density aluminium thermal baseplate construction, it is optimised for either conduction cooled applications. The AGQ500 converter has an installed height of just 12.7mm, making it ideal for systems with demanding inter-board spacing requirements.

Standard features include input undervoltage lockout, remote ON/OFF and differential remote sense, as well as comprehensive protection against overtemperature and output overcurrent or overvoltage conditions.

Features and benefits

- Delivers up to 10A output current
- Ultra-high efficiency 94% typ. at full load
- Wide input range: 36V to 75V
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- High power density
- Low output noise
- Trim function: 50% to 114%

BEL POWER SOLUTIONS ORQB-50Y 50W 1/4 BRICK ISOLATED DC-DC CONVERTERS



[VIEW PRODUCT DETAILS](#)



Bel Power Solutions has introduced ORQB-50Y series, a rugged 50W quarter brick isolated DC-DC converter. The ORQB-50Y series provides 50W single output voltages of 5V, 12V, 15V, 24V and 48V from an ultra-wide input range from 14.4VDC to 154VDC and operates on all nominal battery voltages from 24V to 110V with one module, making it ideal for railway and harsh industrial applications.

The ORQB-50Y series is designed for embedded computing, communication and control systems, such as Ethernet switches, TCMS, passenger information systems, on-board WLAN, PoE applications and door control.

Standard features include remote ON/OFF, input under- and over-voltage protection, output overvoltage protection, overcurrent and short-circuit protection. This converter also provides a 5V/5mA auxiliary supply, which is typically used for Wake-On-LAN applications. The hold-up circuit achieves a 10ms interruption time with smaller amount of external capacity and saves board space. Conformal coated PCB is used for environmental ruggedness; also approved to IEC/EN/CSA/UL 62368-1 and designed in accordance to EN 50155.

BEL POWER SOLUTIONS EOS EZVC 20 – 65 WATT EXTERNAL DESKTOP ADAPTORS



[VIEW PRODUCT DETAILS](#) 

Bel Power Solutions has introduced its `eZVC 20-65`. This miniature and energy efficient product series of external desktop adaptors is available from 20W to 65W in audio/video, Information Technology Equipment (ITE) and medical grade complying with the latest energy efficiency Level VI standards.

It is available with standard jack plug connectors and customised DC connection options upon request. AC input C6/C8/C14 standard and modified options is available in the same product size. These adaptors suit a wide variety of cost-sensitive industrial and medical applications while maintaining industry-leading performance.

The eZVC 20W to 65W adapter series replaces the EOS SG/FS/NS/EVC/MVC series of adaptors.

Features

- Energy efficiency Level VI
- Medical and AV/ICT approvals
- C6, C8, C14 input type option
- Output voltage from 12V to 58V
- IEC/EN/UL 62368-1:2018 Class I and Class II
- IEC/EN/ANSI/AAMI 60601-1 AMD1 Class I and Class II
- EMC 6060-1-2 4th edition
- LPS (Limited Power Source)
- DC LED signal options
- Miniature size

DELTA IMA SERIES 2000W 48V MEDICAL POWER SUPPLY



[VIEW PRODUCT DETAILS](#) 

Delta has introduced the IMA 2,000W power supply series for medical and industrial applications.

Features

- Safety rated for medical, Industrial and IT
- Wide operating input voltage range: 80VAC to 275VAC or 120VAC to 300VAC
- Wide adjustable output voltage range (+/-14%)
- 5VAC standby output
- High efficiency: up to 95%
- Size: 309.6mm x 127mm x 40.6mm (12.2" x 5" x 1.6") (1U design)
- Variable speed fan control
- Low acoustic noise level of less than 39dB(A)
- Active current sharing
- 2 x MOPP and BF appliances
- PMBus™ compatible for control, programming and monitoring
- 500,000 hour MTBF
- Optional conformal coating
- 3 year warranty

DELTA LYTE II SERIES 120W AND 240W DIN RAIL POWER SUPPLIES



[VIEW PRODUCT DETAILS](#) 

Delta's newest LYTE II series of DIN rail power supply is up to 30% slimmer compared to its LYTE I version. It can help to save precious installation space. The series offers choices of 12V, 24V and 48V nominal output voltages in 120W and 240W. The overcurrent protection is designed to operate in constant current mode, which makes the LYTE II series suitable for inductive and capacitive load applications.

Certifications and approvals include IEC 60950-1, IEC/EN/UL 62368-1, IEC/EN 61010-1 and 61010-2-201, CCC, EAC and RoHS Directive. Electromagnetic radiated and conducted emissions are compliant to the heavy industrial EN 61000-6-4 Class B emission standard and EN 61000-6-2 immunity standard.

Features

- Universal AC input voltage range
- Built-in constant current circuit for reactive loads
- Operates from -30°C to +70°C with -40°C cold start
- Reduced no-load power consumption
- Compliance with DOE VI energy standard
- Compliance to SEMI F47 @ 200VAC

DELTA MEG-3K0A9 SERIES 9 SLOT 3000W CONFIGURABLE POWER SUPPLY



[VIEW PRODUCT DETAILS](#) 

Delta's newest 3,000W output power supply to the MEG-A configurable series. The MEG-3K0A9's power density is up to 27W/in³ in 7" x 10" x 1.59" package with a total output of 3,000W up to 18 isolated outputs. Each individual output can be configured between 2VDC to 60VDC, output current up to 45A with single slot single output module, up to 100A with a triple slot single output module. Features included current sharing, PC GUI for easy parameter setting and monitoring, and intelligent fan speed control. A communication adaptor can convert PMBus to USB, RS232 or RS485 interface and is also available for 3 input connector options; EU terminal, US terminal and C22. Major approvals include IEC/EN/CSA 60601-1 (medical) and IEC/EN/UL/CSA 62368-1 (industrial). The MEG-3K0A series is certified for EMC Standards EN 55011 for Industrial, Scientific and Medical (ISM) radio-frequency equipment, and EN 55032 for Industrial Technology Equipment (ITE) radio-frequency equipment. It is fully compliant with the RoHS Directive for environmental protection.

Features

- Up to 3,000W in 7" x 10" x 1.59" package
- Up to 27W/inch³ power density
- Full power up to +50°C ambient
- 9 slots modules configurable
- 2xMOPP isolation for medical application
- Output selectable from 2V to 60V
- Current sharing
- Class B conducted and radiated EMI
- IEC 60601-1-2 4th edition immunity compliance
- Normal and reversed option for global remote ON/OFF and air flow direction without power de-rating
- Analogue and digital voltage trimming
- PMBus Ver 1.3 supported
- Intelligent fan speed control
- Optional RS485/RS232/USB communication adaptors
- PC GUI for easy parameter setting and monitoring

DELTA MEG-700A3 SERIES 700W CONFIGURABLE POWER SUPPLY



[VIEW PRODUCT DETAILS](#) 

Delta's 700W MEG-A configurable power supply series is now available. The MEG-700A3 comes with 3 slots in compact size power density of 14.5W/in³ and efficiency up to 93%. The 3 individual modules allow a maximum output of 180W, 300W and 700W respectively. The output voltage can be configured between 2V to 60V with up to 6 different outputs. Additional features include current sharing and intelligent fan speed control.

Major approvals include IEC/EN/CSA 60601-1 (medical), IEC 60950-1, and IEC/EN/UL/CSA 62368-1 (industrial). The MEG-700A series is certified for EMC standards EN 55011 for Industrial, Scientific and Medical (ISM) radio-frequency equipment, and EN 55032 for Industrial Technology Equipment (ITE) radio-frequency equipment. It is fully compliant with the RoHS Directive for environmental protection.

Features

- Up to 700W in 3.5" x 8.5" x 1.63" package
- Up to 14.5W/in³ power density
- Full power up to +50°C ambient
- 3 slots configurable modules
- 2xMOPP isolation for medical applications
- Output selectable from 2V to 60V
- Current sharing for single slot modules
- Class B conducted and radiated EMI
- IEC 60601-1-2 4th edition immunity compliance
- Normal and reversed option for global remote ON/OFF
- Analogue voltage trimming

DELTA MEU-650A24T SERIES COMPACT 650W POWER SUPPLIES



[VIEW PRODUCT DETAILS](#) 

Delta's newest 650W model, MEU-650A24T, part of MEU series medical power supply. The MEU-650A24T can deliver up to 650W with forced air or 450W convection cooled, in a standard footprint 4" x 6". It is equipped with a 12V/0.6A fan output and 5V/2A standby output. High efficiency up to 95.5%, high power density up to 17.2W/inch³ and a wide operating temperature range of -20°C to +70°C (full power available to +50°C). The MEU-650A24T is suitable for various applications such as ultrasound, anesthesia and IT equipment.

Major approvals include IEC/EN/CSA 60601-1 (medical), IEC 60950-1, and IEC/EN/UL/CSA 62368-1 (ITE) including IEC/EN 60335-1 and IEC 61558-1 (household appliances). The MEU-650A24T is also certified with EMC standards EN 55011 for Industrial, Scientific and Medical (ISM) radio-frequency equipment, and EN 55032 for Information Technology Equipment (ITE) radio-frequency equipment; as well as full compliance with RoHS Directive for environmental protection.

Features

- Convection/force air cooled
- Up to 650W in 4" x 6" x 1.575" package
- Up to 17.2W/inch³ power density
- Full power up to +50°C ambient
- High efficiency up to 95.5%
- Up to 500kHrs MTBF
- 2 x MOPP Isolation
- Suited for BF type medical products.
- 5V/2A standby output
- 12V/0.6A fan output
- Current sharing
- Conformal coating (optional)
- Class B conducted and radiated EMI
- IEC 60601-1-2 Ed.4 immunity compliance
- Normal and reversed option for remote ON/OFF and power good signal
- Voltage trimming

FLEX POWER MODULES BMR685 1300W HALF BRICK DC-DC CONVERTER



[VIEW PRODUCT DETAILS](#) 

With telecoms infrastructure shifting to 5G, the RFPA is becoming increasingly power-hungry, and so for these RF power amplifier applications, we've launched a new series of highly efficient DC-DC converters in a compact package. The BMR685 is the first digital DC-DC converter for Radio Frequency (RF) power amplifiers in the half-brick form factor that can provide a continuous output power of up to 1,300W.

Ideal for both LDMOS and Gallium Nitride (GaN) applications needing a 50V rail, the converter has an output voltage range of 25V to 55V, and can deliver up to 26A of output current. Its input voltage range is 36V to 75V, and isolation between input and output is 2,250V.

Features

- Industry standard half-brick 61mm x 57.9mm x 12.7mm (2.4" x 2.28" x 0.5")
- High efficiency, typ. 97.2% at half load, 50Vout
- 2,250VDC input to output isolation
- Meets safety requirements according to IEC/EN/UL62368-1
- PMBus revision 1.3 compliant
- MTBF 4.97 million hours

FLEX POWER MODULES PNA 6A OUTPUT NON-ISOLATED DC-DC POL CONVERTERS



[VIEW PRODUCT DETAILS](#) 

The PNA series is an analogue non-isolated Point of Load (PoL) regulator that offers excellent efficiency and thermal performance in a small form factor. Its compact size and wide input voltage range of 9V to 36V mean that it is ideal for a range of industrial applications, including robotics, factory automation and process control, and that it is suitable for both 12V and 24V power systems.

The regulator has high efficiency of 95.5% at 12Vin and 5.5Vout, at full load. This reduces power losses and heat dissipation. It delivers an adjustable output of 0.9V to 5.5V, at up to 6A output current, which translates to a maximum power output of 33W.

The PNA series provides excellent thermal performance, and can operate at full load in ambient temperatures above +100°C. It has an operating temperature range of -40°C to +125°C.

To save board space, the PNA series is provided in a small form factor, measuring 13mm x 12.35mm x 6.2mm (0.512" x 0.486" x 0.244"). The device also supports bottom-side PCB mounting, thus further reducing board space requirements.

Features

- Small size 13mm x 12.35mm x 6.2mm (0.512" x 0.486" x 0.244")
- 0.9V to 5.5V output voltage range
- 6A maximum output current
- High efficiency, typ. 93.8% at 24Vin, 5.5Vout, 6A load
- Control loop with fast load transient response
- Allows synchronisation to an external clock
- Meets safety requirements according to IEC/EN/UL62368-1
- MTBF 71.84 Mh

MEAN WELL 200KN SERIES 200W PWM OUTPUT KNX LED DRIVER



[VIEW PRODUCT DETAILS](#) 

The PWM-200KN series is a 200W AC-DC LED driver featuring the constant voltage mode with PWM style output, which is able to maintain the colour temperature and the brightness homogeneity when driving all kinds of LED strips and constant voltage LED bulbs. The built-in KNX interface is to avoid using the complicated KNX-DALI gateway and equipped with KNX data secure. KNX data secure offers protection against manipulation in building automation and can be configured in the ETS project. PWM-200KN operates from 100VAC to 305VAC and offers models with output voltage between 12V and 48V. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40°C to +85°C case temperature under free air convection. The minimal dimming level low to 0.01% is suitable for low light level applications, e.g. cinema. The output frequency is changeable up to 4KHz compliant with the IEEE1789 2015 no risk requirement and the EU-(I) Eco design stroboscopic visibility measure SVM requirement, providing a great solution for health concerns due to light flickering.

Features

- Constant voltage PWM style output with user changeable frequency up to 4KHz compliant IEEE1789-2015 and EU ecodesign SVM requirement
- Min dimming level 0.01%
- Plastic housing with Class II design
- Standby power consumption <0.5W
- Supports KNX data secure
- No need for KNX-DALI gateway
- Typical lifetime >50,000 hours
- 5 years warranty

Applications

- LED strip lighting
- Indoor LED lighting
- LED decorative lighting
- LED architecture lighting
- Type for use in Class I, division 2HL hazardous (classified) locations
- Cove lighting

MEAN WELL GSV30/60 SERIES PFC LED POWER SUPPLY



[VIEW PRODUCT DETAILS](#) 

The GSV30/60 series is a 30W/60W external wall-mounted LED power supply with PFC function. The design of this product is based on the "plug and play" concept for adaptors. The AC input side exploits the 2-pole (Class II, no FG) standard plug, and the output side is equipped with the most highly accepted DC connector (2.1mm x 5.5mm x 11mm) in the market. This product accepts 180VAC to 264VAC input and offers constant voltage output with 12V/24V or 48V. The design complies with the lighting requirements of EMI EN55015 and the harmonic current demand according to EN61000-3-2 Class C. In addition, the no load power consumption is less than 0.5W, making GSV30/60 conform to the ErP regulation required by the European Union for lighting systems as well.

Features

- AC 180V to 264V input
- Class II/2 power unit, no FG
- Built-in active PFC function with EN61347-1 regulation
- Constant voltage design
- Protections: short circuit/over load/over voltage
- Cooling by free air convection
- No load power consumption <0.5W
- Various DC plug quick adapter accessory available
- 3 years warranty

Applications

- LED strip lighting
- Indoor LED lighting
- LED decorative lighting
- Commercial lighting
- Mirror lighting
- Table light
- Portable lighting

MEAN WELL NTS/NTU-1200 SERIES 1200W PURE SINE WAVE DC-AC INVERTER



[VIEW PRODUCT DETAILS](#) 

MEAN WELL introduced the NTS-250P/400P, NTS-300/450, NTS-750 series of DC-AC pure sine wave inverters, and now adds the NTS/NTU-1200 series of 1,200W external portable enclosed inverters. The NTS/NTU-1200 replaces the previous generation of the TS-1000 series and brings about improvements such as the increase of 200W with the smaller case size, easier operation of panel functions, optimised performance, and more competitive pricing. The NTU-1200 series with AC by-pass function allows AC mains to directly provide the energy to load without using the inverter's battery.

Features

NTS-1200

- True sine wave output (THD<3%/0)
- High surge power up to 2,000W
- Temperature controlled cooling fan
- AC output voltage and frequency selectable by DIP S.W
- No load dissipation <1.5W at standby saving mode

NTU-1200

- Built-in UPS function (AC by-pass)
- True sine wave output (THD<3%/0)
- High surge power up to 2,000W
- Temperature controlled cooling fan
- AC output voltage and frequency selectable by DIP S.W

Applications

- Home and office appliances
- Power tools
- Portable equipment
- Vehicles
- Yachts
- Off-grid solar power systems
- Telecom or datacom systems



Energy storage

KYOCERA AVX SCP SERIES PRIZMACAP™ SUPERCAPACITORS



[VIEW PRODUCT DETAILS](#)

Kyocera AVX's PrizmaCap™ capacitors, or SCP Series, are prismatic EDLCs (supercapacitors). The SCP series provides the lowest profile and widest operating temperature available in Kyocera AVX supercapacitors. Used by themselves or in conjunction with primary or secondary batteries, they provide extended backup time, longer battery life, and provide instantaneous power pulses as needed. They are best used in applications requiring pulse power handling, and energy storage.

Features

- Larger capacitance in prismatic form factor
- Widest temperature rating
- Low profile and light weight
- Custom design capabilities

Applications

- Wearables
- Handhelds
- High temp. industrial
- Bluetooth keyboards
- Battery assist
- Power peripherals
- Tablets/E-readers
- High reliability
- Space constrained designs

KEMET FMD SERIES SUPERCAPACITORS



[VIEW PRODUCT DETAILS](#)

FMD series supercapacitors, also known as Electric Double-Layer Capacitors (EDLCs), are intended for power back-up in automotive applications. Enhancements to the design and selected material upgrades were introduced to deliver 1,000 hours at 85°C/85% RH rated voltage and automotive testing protocol with extended maximum operational temperature life up to 85°C. These capacitors are manufactured in an ISO TS 16949 certified plant and are subjected to PPAP/PSW, as well as change control.

Features

- Automotive testing protocol
- TS 16949 certified plant
- Subject to PPAP/PSW and change control
- Wide range of temperature from -40°C to +85°C
- Maintenance free
- Maximum operating voltage of 5.5VDC
- Highly reliable against liquid leakage
- Lead-free and RoHS compliant

Applications

- Supercapacitors have characteristics ranging from traditional capacitors and batteries. As a result, supercapacitors can be used like a secondary battery when applied in a DC circuit. These devices are best suited for use in low voltage DC hold-up applications such as embedded microprocessor systems with flash memory. FMD type automotive grade supercapacitors can be stable under harsh environmental conditions such as high humidity and high temperature

[BUY NOW](#)

KEMET FU0H SERIES SUPERCAPACITORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

FU0H series supercapacitors, also known as Electric Double-Layer Capacitors (EDLCs), are intended for power back-up in automotive applications. Enhancements to the design and selected material upgrades were introduced to deliver 1,000 hours at 85°C/85% RH rated voltage and up to 4,000 hours at 85°C operational life. These capacitors are manufactured in an ISO TS 16949 certified plant and are subjected to PPAP/PSW, as well as change control.

Features

- Automotive testing protocol
- TS 16949 certified plant
- Subject to PPAP/PSW and change control
- Wide range of temperature from -40°C to +85°C
- Maintenance free
- Maximum operating voltage of 5.5VDC
- Highly reliable against liquid leakage
- Lead-free and RoHS compliant

Applications

- Supercapacitors have characteristics ranging from traditional capacitors and batteries. As a result, supercapacitors can be used like a secondary battery when applied in a DC circuit. These devices are best suited for use in low voltage DC hold-up applications such as embedded microprocessor systems with flash memory. FU0H series automotive grade supercapacitors can be stable under harsh environmental conditions such as high humidity and high temperature



PANASONIC PAN1781 BLUETOOTH® 5 LOW ENERGY MODULE



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

Panasonic has introduced the PAN1781, featuring the Nordic nRF52820 single-chip controller. The Bluetooth 5 features as the LE coded PHY for an elongated range or the high speed 2M PHY are supplemented by the support of Angle of Arrival (AoA) and Angle of Departure (AoD) direction finding using Bluetooth.

An output power of up to 8dBm and the high sensitivity of the nRF52820 in combination with the LE coded PHY make the module very attractive in applications, where a long range is required. It also supports Bluetooth mesh, Thread and Zigbee mesh protocols.

In addition, the ultra-low current consumption of the PAN1781 makes the module an ideal choice for battery powered devices. With the Cortex® M4 processor, 32kB RAM, and the built-in 256kB flash memory, the PAN1781 can easily be used in standalone mode, thereby eliminating the need for an external processor, saving complexity, space, and cost.

A 128-bit AES/ECB/CCM/AAR co-processor may be used for on-the-fly packet encryption so the PAN1781 provides advanced wireless connectivity in a small package, smart home, industrial and much more applications.

Features

- Bluetooth 5.1 (long range, 2Mbps PHY, angle of arrival and angle of departure direction finding)
- ARM® Cortex®-M4 (64MHZ) with 256kB flash memory and 32kB internal RAM
- 128-bit AES/ECB/CCM/AAR co-processor for on-the-fly packet encryption
- Up to 16 general purpose I/Os, which are shared by up to 2 SPI, 2 I²C, 1 UART, COMP, QDEC, nRESET
- USB 2 full speed device interface
- Built-in temperature sensor
- Qualified Bluetooth mesh profile stack
- REACH and RoHS Compliant
- Drop in replacement for PAN1026A and PAN1762

PANASONIC PAN9520 WI-FI® 3 EMBEDDED MODULE



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

The PAN9520 is a 2.4GHz 802.11 b/g/n embedded Wi-Fi module based on espressif ESP32-S2 that includes the powerful Xtensa® 32-bit LX7 CPU. An integrated chip antenna, and QSPI memory enable the module to be used in a variety of stand-alone or host-controlled applications. The integrated crystal ensures connection performance over full temperature range and lifetime. Although the PAN9520 is one of the smallest modules on the market, it offers a rich set of peripherals like full-speed USB OTG, SPI, UART, I²C, and many more.

The PAN9520 combines a high-performance CPU, high-sensitivity wireless radio, Baseband (BB) processor, Medium Access Controller (MAC), encryption unit, ROM bootloader, chip-internal SRAM, and module-internal QSPI flash and PSRAM. Features such as CCMP, TKIP, WAPI, WEP, BIP, and an AES accelerator enable the usage of secure data connections.

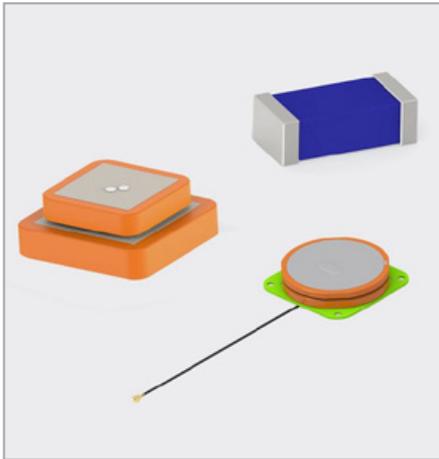
Parallel support of access point and station mode allows easy setup of simultaneous Wi-Fi connections from the module to smart devices and home network routers.

With the Espressif Integrated Development Framework (ESP-IDF), software can be developed for a wide range of applications. At the same time, a huge number of software examples can be used as starting point for the development. Besides, Espressif's AT software can be used which is available as binary. Moreover, the AT software sources can be cloned and adapted.

Features

- Embedded 2.4GHz Wi-Fi 802.11 b/g/n module
- Xtensa single-core 32-bit LX7 microprocessor, up to 240MHz
- Chip internal 128kB ROM, 320kB SRAM, and 16kB low power SRAM
- Integrated QSPI flash and PSRAM; depends on product version:
 - > 4MB flash/2MB PSRAM
 - > 1MB flash/No PSRAM
- All security features required for WPA2 and WPA3 personal
- Supports 20MHz and 40MHz bandwidths in 2.4GHz band with data rates up to 150Mbps
- Simultaneous support for infrastructure station, SoftAP, and promiscuous modes
- 802.11mc Fine Time Measurement (FTM)
- 43× programmable GPIOs with a rich set of alternative functionalities

TE CONNECTIVITY CERAMIC ANTENNAS FOR MULTI-BAND GNSS



[VIEW PRODUCT DETAILS](#) 

TE Connectivity's portfolio of standard ceramic antennas for multi-band GNSS provide the reliable and precise tracking performance required by demanding applications like smart transportation, smart agriculture, drones and robots.

Features

- Reliable and precise tracking performance enhanced by integration of antenna as part of the device
- Increased accuracy at the decimeter (dm) and centimeter (cm) level instead of meter (m) level
- Antennas for GPS, GLONASS, BeiDou and Galileo can provide global access to multiple satellites and frequency bands
- Stacked ceramic patch (active) antennas can integrate multiple bands to increase the number of received satellites in challenging environments
- Ceramic chip antennas are smaller than PCB trace antennas, enabling significant space savings for multi GNSS bands
- Stacked patch design options can enable smaller footprint
- Quick time-to-market and miniaturisation enabled by TE's implementation support
- Support antenna implementation for optimised efficiency and isolation between multiple antennas and final throughput, which can allow seamless operation for applications

Applications

- Fleet telematics
- Stolen vehicle tracking
- Livestock tracking
- Field condition tracking
- Drones
- Robots



AMPHENOL PIHER SENSING SYSTEMS MSC-360 HALL-EFFECT ROTARY POSITION SENSORS



[VIEW PRODUCT DETAILS](#) 

This sensor complements Piher's broad range of magnetic sensors providing a perfect fit for preferential use in space constraint applications.

Despite its lightweight and miniature size of only 21mm, this hall-IC angle sensor delivers high performance with up to 360° electrical angle (without dead zone), 12bit resolution, extended life and EMI and ESD protection.

The MSC-360 can easily be tailored to customers' needs providing value at the lowest cost even for the most demanding environments.

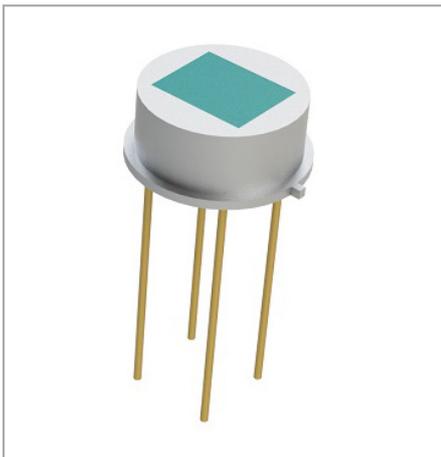
Features

- Non-contacting long life angle/position absolute sensor
- Embedded OEM motion control applications
- Pedal position sensor
- Throttle/EGR valve and gear position sensor
- Height and suspension sensor
- Medical devices and exoskeletons
- Industrial automation displacement sensor
- Joysticks and hand controls
- Automatic Guided Vehicles (AGVs) steering sensors
- Forklifts
- Robotics, material handling, industrial equipment, HVAC monitoring and control, etc

Applications

- Energy and smart Infrastructure
- Industrial appliances and tools
- Home-, office- and catering appliances
- Construction
- Automotive
- Forestry and horticultural
- Mechatronics and robotics
- MedTech
- Production machines and automation systems
- Transportation and mobility
- Optical systems and microtechnologies

KEMET QFCE PYROELECTRIC INFRARED FLAME SENSORS



[VIEW PRODUCT DETAILS](#) 

[BUY NOW](#) 

KEMET's QFCE pyroelectric flame sensors combine high sensitivity with fast response times and high dynamic range to ensure rapid and accurate detection of small and large flames, nearby or over larger distances. These high quality sensors, in their industry standard TO-39 package, integrate a digital, current mode read-out offering high responsivity over the full frequency range of flame flicker from 3Hz to 30Hz. Industry standard I²C communication enables plug-and-play connectivity to microcontrollers and allows easy tuning and calibration. Programmable gain and filtering offer maximum flexibility in system design. Their long and maintenance-free operational lifetime and various low power modes make these sensors ideal for any smart or IoT type of applications.

Features

- Exceptionally high responsivity
- Wide field of view, typically 100° (subject to filter band pass specification)
- Rapid recovery from thermal and electrical shock (<1 second downtime)
- TO39 package
- Digital output and I²C communication
- Programmable gain and filtering
- Various optical filter options
- Integrated configurable amplifier, filter and ADC
- Low power consumption
- Evaluation kit for digital TO infrared flame sensing evaluation

Applications

- Industrial
- Industrial IoT
- Oil and gas
- Infrastructure protection
- Forest protection
- Smart homes
- Smart buildings
- Outdoor fire detectors
- Transportation
- Water

MURATA SCHA63T 6-DOF XYZ-AXIS GYROSCOPE & XYZ-AXIS ACCELEROMETER



Murata has developed a MEMS (Micro-Electro-Mechanical Systems) 6DoF (Six Degrees of Freedom) inertial sensor for autonomous off-highway vehicles, dynamic inclination sensing and GNSS positioning support. The sensor enables further advancement in technology and novel solutions for advanced driver/operator assistance systems, autonomous vehicles and GNSS-based measurement instruments. The product delivers highest performance available on component level in key parameters like bias stability and noise. Murata calibrates orthogonality of all measurement axes. This allows customers and system integrators to skip this costly and performance-critical process step.

Features

- Cross-axis calibration enables better than 0.14° orthogonality error
- Excellent vibration robustness
- Extensive self-diagnostics
- Can be used in safety critical applications

Applications

- Inertial Measurement Units (IMUs)
- Navigation and positioning
- Machine control and guidance
- Dynamic inclination
- Robotic control and UAVs

[VIEW PRODUCT DETAILS](#) 

OMRON EE-SY1201 SERIES LONG DISTANCE SMD TYPE PHOTOMICRO SENSOR



OMRON EE-SY1201 series' built-in lens achieves 3mm focal length. This series is a small surface mounting type reflection sensor.

Features

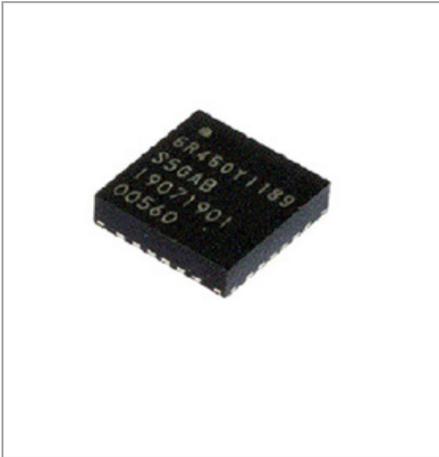
- Surface mount
- Outline 3mm x 4mm x 2mm
- l_{peak} distance: 3mm
- Photo-transistor output
- Reflow soldering
- Miniaturisation
- Detects in long distance
- Free design to threshold (detect in max. about 8mm)

Applications

- Mini-printers
- Industrial cameras
- Small equipment
- FA equipment
- Automation equipment

[VIEW PRODUCT DETAILS](#) 

PANASONIC EWTS5G SERIES 6-IN-1 INERTIAL SENSOR



[VIEW PRODUCT DETAILS](#) 

Panasonic has added the 6-in-1 inertial sensor to its already broad range of speciality sensor solutions.

Panasonic's 6-in-1 sensor 6DoF (Degrees of Freedom) inertial sensor meets the ISO26262 functional safety standard for automotive applications. The 6-in-1 inertial sensor features a unique sensing element consisting of three accelerometers and three gyroscopes on one single MEMS chip providing high sensing accuracy and much more system design flexibility. MEMS, ASIC and Cap are directly bonded in the wafer level and packaged. This enables the 6-in-1 inertial sensor to be compact, highly accurate, easy-to-install and highly reliable.

The 6-in-1 inertial sensor with 6DoF is available in one very small footprint package size of 4.5mm x 4.5mm x 1.1mm enabling compact and simple ECU system design.

Features

- 6DoF (Degrees of Freedom) in one package size 4.5mm x 4.5mm x 1.1mm
- 3 accelerometers and 3 gyro sensors on one single MEMS chip
- All 6 sensor elements are in a single chip and maintain sensing axis to axis with very tight accuracy
- Single MEMS and ASIC chip design, directly bonded at wafer level
- ISO26262 functional safety compliance for automotive safety systems and self diagnostics
- ASIL-B, compatible with ASIL-D functional safety system development, automotive grade for safety applications including rollover detection and Electric Stability Control (ESC) systems

- Strong self diagnostic with two temperature sensors for compensation
- AEC-Q100 compliant
- RoHS and REACH compliant

Applications

- Airbag rollover detection, ESC
- Leveling, calibration, compensation
- Vehicle position, vibration sensing, active suspension
- Direction, leveling, vibration compensation
- Motion and position sensing
- Off-road vehicles
- Construction vehicles
- Industrial use

PANASONIC ELECTRIC WORKS FLAT SQUARE TYPE PAPIRS



[VIEW PRODUCT DETAILS](#) 

The "Flat Square Type" can be integrated almost invisibly into any product, thanks to its inconspicuous flat and square lens which hides the typical motion detector look. This sensor is suitable for ceiling-, wall- or corner- mounting and can therefore be used in countless product designs. This passive infrared motion sensor extends the PaPIRS families EKMC (170µA) for battery-free and EKMB (1µA, 2µA and 6µA) for battery-operated devices.

Features

- Typical detection distance: 5m
- Max. detection zone area (rectangular): 9.3m x 9.3m @3m
- Dimensions top lens: 9.6mm x 9.6mm
- Sensor height: 10.9mm
- Digital output (open drain) with 1µA, 2µA, 6µA and 170µA
- Analogue output (op-amp) with 170µA
- Analogue type includes integrated amplifier circuitry
- Lens colours: white, pearl white, and black

TDK INVENSENSE IAM-20685 6-AXIS MEMS GYROSCOPE AND ACCELEROMETER



[VIEW PRODUCT DETAILS](#) 

Taking advantage of TDK's proprietary MEMS fabrication platform and technology, the IAM-20685 features a highly integrated single-chip 6-axis MEMS gyroscope and accelerometer combination in a small plastic package. Offering unparalleled low-power consumption, compared to competitive sensor solutions within the same product category, the IAM-20685 enables system-orientation-free mounting and unprecedented design flexibility for autonomous systems applications.

The IAM-20685 delivers six degrees of freedom, sustaining dynamic, highly accurate data under all conditions directly to the ADAS within the vehicle, to automate and enhance the driver experience when driving or parking. It reports high resolution, stable and reliable 16-bits acceleration and angular velocity along the three orthogonal axes. This enables parking-assistance systems to efficiently determine the vehicle's motion and vision systems to enable stabilisation techniques and improve image quality, and for positioning systems to enhance absolute position accuracy. Due to six separate masses integrated in its monolithic structure, IAM-20685 offers small cross-axis sensitivity and allows for accurate reporting of linear acceleration and angular velocity into the vehicle's reference frame, regardless of the installation mounting orientation, to improve design flexibility and ADAS performance.

Features

- ASIL-B rated
- Automotive-qualified based on AEC-Q100 Grade 2
- User-selectable full-scale for both gyroscope and accelerometer
- Two embedded temperature sensors
- 16-bit output for accelerometer, gyroscope, and temperature sensors
- SPI serial interface with CRC
- -40°C to +105°C operating temperature range
- 4.5mm x 4.5mm x 1.1mm QFN24 package with wettable flanks

Applications

- ADAS
- Autonomous driving systems
- Automated parking
- Vision systems
- Navigation system aids for dead reckoning
- Telematics
- Accurate positioning for vehicle-to-vehicle and infrastructure

TDK INVENSENSE ICM-40627 HIGH PERFORMANCE 6-AXIS MOTIONTRACKING™ IMU



[VIEW PRODUCT DETAILS](#) 

The ICM-40627 is a 6-axis MEMS motion tracking device that combines a 3-axis gyroscope and a 3-axis accelerometer. This device is targeted at hand-held devices that require precise mouse pointing and motion control. The ICM-40627 comes bundled with TDK's air motion library that enables precise mouse pointing, cursor control, swipe, roll and other motion gestures. The ICM-40627 and the air motion library together provide a complete out-of-the-box solution for hand-held devices such as smart TV remotes, air mouse, presentation pointers and smart pencils.

ICM-40627 has a configurable host interface that supports I²C and SPI serial communication, features a 2 KB FIFO and 2 programmable interrupts with ultra-low-power wake-on-motion support to minimise system power consumption. The ICM-40627 supports low gyro and accel sensor noise in this IMU class and has high stability against temperature. Other industry-leading features include InvenSense on-chip APEX motion processing engine for gesture recognition, activity classification, and pedometer, along with programmable digital filters, and an embedded temperature sensor. The device supports a VDD operating range of 1.71V to 3.6V, and a separate digital IO supply, VDDIO from 1.71V to 3.6V.

Features

- Gyroscope noise: 7mdps/√Hz and accelerometer noise: 110μg/√Hz
- User selectable gyro full-scale range (dps): ±15.6/±31.2/±62.5/±125/±250/±500/±1,000/±2,000
- User selectable accelerometer full-scale range (g): ±2/±4/±8
- User-programmable digital filters for gyro, accel, and temp sensor
- APEX motion functions:
- Host interface: 1MHz I²C, 24MHz SPI

Applications

- Pointing mouse
- Remote control

TDK INVENSENSE ICM-42688-V HIGH PRECISION 6-AXIS MEMS MOTIONTRACKING™



[VIEW PRODUCT DETAILS](#) 

The ICM-42688-V is a high performance 6-axis MEMS motion tracking device that combines a 3-axis gyroscope and a 3-axis accelerometer. This device is targeted at applications that require premium levels of sensor fusion accuracy for precise orientation detection. This device comes bundled with TDK's advanced sensor fusion library that provides highly accurate 6-axis and 9-axis sensor fusion outputs. The ICM-42688-V and the advanced sensor fusion library together provide an accurate out-of-box motion tracking solution for applications such as virtual reality, augmented reality, hearables, gaming, wearables, smartphones, tablets, and robotics.

The ICM-42688-V has a configurable host interface that supports I³CSM, I²C and SPI serial communication, features a 2KB FIFO and 2 programmable interrupts with ultra-low-power wake-on-motion support to minimise system power consumption.

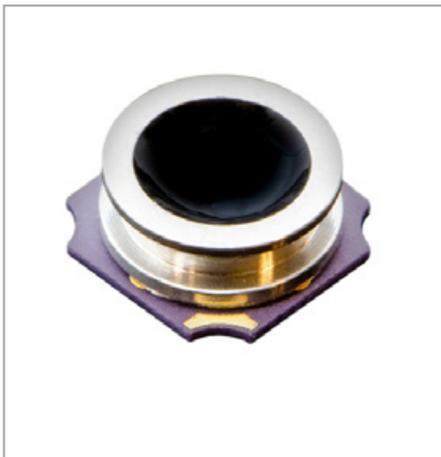
Features

- Gyroscope noise: 2.8mdps/√Hz and accelerometer noise: 70μg/√Hz
- User selectable gyro full-scale range (dps): ±15.6/31.2/62.5/125/250/500/1,000/2,000
- User selectable accelerometer full-scale range (g): ±2/4/8/16
- User-programmable digital filters for gyro, accel, and temp sensors
- APEX motion functions
- Host interface: 12.5MHz I³CSM, 1MHz I²C, 24MHz SPI

Applications

- AR/VR controllers
- Head mounted displays
- Wearables
- Sports
- Robotics
- IoT applications

TDK INVENSENSE ICP-10125 10ATM PRESSURE AND TEMPERATURE SENSOR IC



[VIEW PRODUCT DETAILS](#) 

The ICP-10125 pressure sensor is based on MEMS capacitive technology which provides ultra-low noise at the lowest power, enabling industry-leading relative accuracy, sensor throughput, and temperature stability. The pressure sensor can measure pressure differences with an accuracy of ±1Pa, an accuracy enabling altitude measurement differentials as small as 8.5 cm, less than the height of a single stair step.

Consuming only 1.3μA @1Hz, the device is available in a small footprint 3.55mm × 3.55mm × 1.45mm chimney package with waterproofing gel providing IPx8 waterproofing to 10 ATM. The ICP-10125 is ideally suited for wearable fitness monitoring and battery powered IoT.

The ICP-10125 offers an industry leading temperature coefficient offset of ±0.5Pa/°C. The combination of high accuracy, low power, temperature stability, waterproofing in a small footprint enables higher performance barometric pressure sensing for sports activity identification and mobile indoor/outdoor navigation.

Features

- Pressure operating range: 30kPa to 110kPa
- Noise and current consumption
- Pressure sensor relative accuracy: ±1Pa for any 10hPa change over 950hPa-1,050hPa at +25°C
- Pressure sensor absolute accuracy: ±1hPa over 950hPa to 1050hPa, 0°C to +65°C
- Pressure sensor temperature coefficient Offset: ±0.5Pa/°C over +25°C to +45°C at 100kPa+
- Temperature sensor absolute accuracy: ±0.4°C
- IPx8: waterproof to 10ATM
- Temperature operating range: -40°C to +85°C

- Host interface: I²C at up to 400kHz
- Single supply voltage: 1.8V ±5%
- RoHS and green compliant

Applications

- Smart watches
- Leisure, sports, and fitness activity monitoring for wearable sensors
- Altimeters and barometers for portable devices
- Indoor/outdoor navigation (dead-reckoning, floor/elevator/step detection)
- Home and building automation
- Weather forecasting

TDK INVENSENSE ICP-20100 LOW NOISE, LOW POWER MEMS BAROMETRIC PRESSURE



[VIEW PRODUCT DETAILS](#) 

The ICP-20100 is a barometric pressure sensor based on MEMS capacitive technology, improving our lead in the development of ultra-low noise at the lowest power and progressing our industry-leading relative accuracy, sensor throughput, and temperature stability. The ICP-20100 achieves the industry's lowest pressure noise of 0.4Pa RMS, while attaining the industry's lowest power consumption of 1.0 μ A, and retains excellent temperature stability with a temperature coefficient of ± 0.5 Pa/ $^{\circ}$ C.

The ICP-20100 capacitive pressure sensor can operate over wide temperature ranges and a variety of applications, meeting US carrier requirements for 3D geolocation and emergency applications such as the enhanced 911 (E911) system, enabling mobile indoor/outdoor navigation, improved activity identification for leisure, sport and fitness purposes, and altitude-hold in drones. The sensor assists in extending battery life for "AlwaysOn" applications due to its extreme low-power consumption.

TDK IIM-42351 SERIES 3-AXIS SMARTINDUSTRIAL™ ACCELEROMETER MEMS DEVICE



[VIEW PRODUCT DETAILS](#) 

The IIM-42351 is a 3-axis accelerometer packaged in a small 2.5mm x 3mm x 0.91mm (14-pin LGA) package. The IIM-42351 includes multiple capabilities to enable easy, robust and accurate inertial and inclination measurements in Industrial applications:

- Low noise: 70 μ g/ \sqrt Hz
- Low power: 0.3mA with all 3 axes delivering full performance
- Output data rate up to 8kHz
- Highly accurate external clock input to increase ODR accuracy, reduce system level sensitivity error, improve measurement impacts from device to device variation
- 2K-byte FIFO that can lower the traffic on the serial bus interface, and reduce power consumption by allowing the system processor to burst read sensor data and then go into a low-power mode
- Wake-on-motion interrupt for low power operation of applications processor
- Operating temperature range: -40 $^{\circ}$ C to +105 $^{\circ}$ C

The host interface can be configured to support I³CSM slave, I²C slave, or SPI slave modes. The I³CSM interface supports speeds up to 12.5MHz (data rates up to 12.5Mbps in SDR mode, 25Mbps in DDR mode), the I²C interface supports speeds up to 1MHz, and the SPI interface supports speeds up to 24MHz. The device features an operating voltage range from 3.6V down to 1.71V

Features

- Digital-output X-, Y-, and Z-axis accelerometer with programmable full-scale range of ± 2 g, ± 4 g, ± 8 g and ± 16 g
- User-programmable interrupts
- I³CSM/I²C/SPI slave host interface
- Digital-output temperature sensor
- External clock input supports highly accurate clock input from 31kHz to 50kHz
- Small and thin package: 2.5mm x 3mm x 0.91mm (14-pin LGA)

- 20,000g shock tolerant
- MEMS structure hermetically sealed and bonded at wafer level
- RoHS and green compliant

Applications

- Tilt sensing
- Platform stabilisation
- Robotics

TDK IIM-42352 SERIES 3-AXIS SMARTINDUSTRIAL™ ACCELEROMETER MEMS DEVICE



[VIEW PRODUCT DETAILS](#) 

The IIM-42352 is a 3-axis accelerometer packaged in a small 2.5mm x 3mm x 0.91mm (14-pin LGA) package. The IIM-42352 includes multiple capabilities to enable easy, robust and accurate inertial and vibration measurements in industrial applications:

The host interface can be configured to support I³CSM slave, I²C slave, or SPI slave modes. The I³CSM interface supports speeds up to 12.5MHz (data rates up to 12.5Mbps in SDR mode, 25Mbps in DDR mode), the I²C interface supports speeds up to 1MHz, and the SPI interface supports speeds up to 24MHz. The device features an operating voltage range from 3.6V down to 1.71V.

Features

- Digital-output X-, Y-, and Z-axis accelerometer with programmable full-scale range of $\pm 2g$, $\pm 4g$, $\pm 8g$ and $\pm 16g$
- User-programmable interrupts
- I³CSM/I²C/SPI slave host interface
- Digital-output temperature sensor
- External clock input supports highly accurate clock input from 31kHz to 50kHz
- Small and thin package: 2.5mm x 3mm x 0.91mm (14-pin LGA)
- 20,000g shock tolerant
- MEMS structure hermetically sealed and bonded at wafer level
- RoHS and green compliant

Applications

- Vibration measurement
- Predictive maintenance
- Tilt sensing
- Platform stabilisation
- Robotics

TDK IIM-42652 SERIES 6-AXIS SMARTINDUSTRIAL™ MOTION TRACKING MEMS



[VIEW PRODUCT DETAILS](#) 

The IIM-42652 is a 6-axis SmartIndustrial™ Motion Tracking device that supports an extended operating temperature range. The IIM-42652 combines a 3-axis gyroscope, and a 3-axis accelerometer in a small 2.5mm x 3mm x 0.91mm (14-pin LGA) package. It also features a 2K-byte FIFO that can lower the traffic on the serial bus interface and reduce power consumption by allowing the system processor to burst read sensor data and then go into a low-power mode. The IIM-42652 supports highly accurate external clock input to reduce system level sensitivity error, improve orientation measurement from gyroscope data and to reduce ODR sensitivity to temperature and device-to-device variation. The host interface can be configured to support I³CSM slave, I²C slave, or SPI slave modes. The I³CSM interface supports speeds up to 12.5MHz (data rates up to 12.5Mbps in SDR mode, 25Mbps in DDR mode), the I²C interface supports speeds up to 1MHz, and the SPI interface supports speeds up to 24MHz. The device features an operating voltage range from 3.6V down to 1.71V.

Features

- Digital-output X-, Y-, and Z-axis angular rate sensors (gyroscopes) with programmable full-scale range of ± 15.625 , ± 31.25 , ± 62.5 , ± 125 , ± 250 , ± 500 , $\pm 1,000$, and $\pm 2,000$ degrees/sec
- Digital-output X-, Y-, and Z-axis accelerometer with programmable full-scale range of $\pm 2g$, $\pm 4g$, $\pm 8g$ and $\pm 16g$
- User-programmable interrupts
- I³CSM/I²C/SPI slave host interface
- Digital-output temperature sensor
- Small and thin package: 2.5mm x 3mm x 0.91mm (14-pin LGA)

- 20,000g shock tolerant
- MEMS structure hermetically sealed and bonded at wafer level
- RoHS and green compliant

Applications

- Navigation
- Orientation measurement
- Tilt sensing
- Platform stabilisation
- Robotics

TDK INVENSENSE ICE-11101 ULTRA LOW POWER MEMS CO₂ GAS SENSOR



[VIEW PRODUCT DETAILS](#)

The ICE-11101 is a miniaturised, ultra-low power MEMS sensor for accurate detection of carbon dioxide (CO₂). It features integrated electronics that offers digital I²C communication, along with an on-board processor to support background processing and user configurability.

The ICE-11101 also features very wide range of sensing capability, from 400ppm to 50,000ppm of CO₂. The ICE-11101 features state-of-the-art MEMS technology combined with advanced packaging and software support, all of which enable accuracy of detection while allowing a miniaturised form factor of 5mm x 5mm x 1mm, with average power (under normal usage scenarios) of less than 1mW.

Other industry-leading features include an embedded temperature sensor, software support available on the embedded micro-controller as well as on the host, automatic background calibration, and an easy-to-use design kit.

The device supports a VDD operating range of 2.7V to 3.3V.

Features

- Baseline accuracy: ±75ppm ±3% of measured value
- Even better accuracy at CO₂ concentrations under 2,000 ppm
- Highly stable output
- Industry-leading sensor response time: <30sec.
- Product variant offers very large sensing range: 400 to 50,000 ppm
- Lifetime: >5 years
- Host interface: 400KHz I²C

Applications

- Indoor Air Quality (IAQ) monitoring
- Outdoor Air Quality Monitoring (AQM)
- Demand Controlled Ventilation (DCV) for homes and buildings
- Automotive in-cabin monitoring
- IoT monitoring devices for home and personal use
- Breath monitoring
- Leakage detection

TE CONNECTIVITY TSY53 DIGITAL TEMPERATURE SENSORS



[VIEW PRODUCT DETAILS](#)

The TSY53 is a miniature digital temperature sensor that provides factory calibrated highly accurate temperature data. The device contains a durable temperature sensor element, A/D converter, and microcontroller to manage data communications via an I²C interface.

The TSY53 is available in a TDFN8 or a XDFN6 package to easily adapt to the space available on a PC board. These packages are very small and have low thermal mass which provides a quick response to temperature changes.

The operating and measurement temperature range is -40°C to +125°C with a resolution of ±0.01°C.

Operating and sleep currents are extremely low making this sensor ideal for mobile and battery power applications.

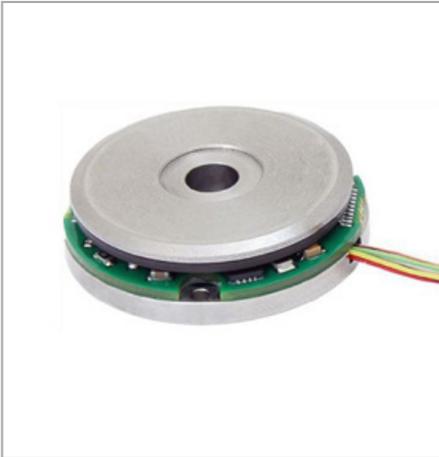
Features

- High accuracy ±0.5°C @ temp.: 0°C to +60°C
- Adjustment of high accuracy temperature range on request
- Low supply current <5µA (standby <0.4µA)
- I²C Interface up to 1MHz
- Small IC-package TDFN8 2.5mm x 2.5mm and XDFN6 1.5mm x 1.5mm
- Operating temperature range: -40°C to +125°C
- Programmable I²C address

Applications

- Industrial control
- Replacement of precision RTDs, thermistors and NTCs
- Heating/cooling systems
- HVAC
- Medical probes and patient monitoring
- Weather stations
- Fitness watches and wearables
- Consumer appliances

VISHAY RAMK027 POSITION SENSOR FOR HARSH WORKING CONDITIONS



[VIEW PRODUCT DETAILS](#)



The Vishay Sfernice RAMK027 high precision position sensor offers higher performance and efficiency for harsh working conditions in embedded equipment and military applications. With an outer diameter of 27mm, the RAMK027 encoder offers comparable features to larger devices. Composed of a stator and rotor, the sensor is insensitive to moisture, dirt, and airborne pollution. The RAMK027 utilises an advanced electronic architecture to achieve >13 bits accuracy and >17 bits resolution, while maintaining high robustness against external magnetic fields, high vibrations, mechanical shocks, and temperature cycling.

Features

- Off-axis design
- Absolute function
- Resolution >17bits
- Accuracy >13bits
- Dimensions: 27.3mm x 4.76mm x 7mm
- Single turn
- Output signal: SSI
- Temperature range: -40°C to +10°C
- Acceleration up to 100g, shock of 180g, vibration of 0.05g/Hz
- EMC: tests performed according to RE101, RE102, RS101, and RS103
- ESD protection

Applications

- Industrial equipment: arm joint position, steering wheel control, small actuators, gimbal function in optical balls
- Military devices: missile guidance functions and missile gimbal functions in homing heads



Connectors

	Automotive	Lighting	Backplane, DIN 41612, 2mm and high speed	Board-to-board	Heavy duty	Industrial	Medical	Military and aerospace	Audio, signal and mobile	DSUB and accessories	DVI, HDMI and SCSI	Modular jacks, plugs and SDL	High speed: USB, firewire, infiniband and IEC	Multimedia and PC cards	Smart card and SIM	IEC connectors and entry modules	IEC distribution units	Heavy duty	Military and aerospace	DIL and SIL	PLCC, PGA and BGA	SIMM and DIMM	Battery and fuse	FFC and FPC	IDC 2.54, 2.00 and 1.27	Headers, receptacles and others	Terminal blocks	Wire-to-wire	RF inc. coax. and antennas	Fibre optics	Cables: FFC, ribbon flat and round	Cable assemblies	Terminal faston	Accessories, pins and contacts			
	Application specific	Board-to-board	Circular	I/O	Memory card	Power	Rectangular	Sockets	Wire-to-board	Terminal blocks	Wire-to-wire	High speed/ high frequency	Others																								
3M		•	•						•					•	•					•	•			•	•		•	•	•	•	•	•	•	•	•	•	
Alps Alpine														•	•																					•	
Amphenol	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Aptiv	•								•					•												•		•		•		•		•			
Bourns				•																																•	
Bulgin					•	•			•			•				•	•							•													
Cinch Connectivity																																				•	
CviLux		•		•						•		•	•								•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dubilier		•	•	•					•	•	•	•	•	•	•	•	•				•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Eaton																											•									•	
Glenair					•	•		•	•																					•	•		•				
Greenconn	•			•						•			•											•												•	
Harwin				•				•													•	•			•	•										•	
Hirose	•	•		•		•	•	•	•			•	•	•	•	•								•	•	•	•	•	•	•	•	•	•	•	•	•	•
ITT	•		•			•	•	•	•	•	•			•					•	•							•									•	
Kycon								•	•	•	•	•	•								•	•		•												•	
Kyocera AVX	•	•		•				•						•										•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lumberg	•					•		•																•	•	•	•									•	
Molex	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Omron				•		•			•			•									•	•														•	
PRECI-DIP				•																	•	•			•											•	
Pulse												•																								•	
Samtec		•	•		•			•				•									•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Schaffner																•	•																			•	
Schurter								•								•	•						•													•	
Stewart				•				•	•		•		•																							•	
Switchcraft					•	•		•	•		•	•	•	•	•	•	•																			•	
TE Connectivity	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Weidmüller																											•									•	

Sensors

	NTC	PTC	RTD	Digital IC	Thermal reed switch	IR thermopile	Thermocouple	Pressure	Force, load, torque and tension	Humidity	VOC and CO ₂	Dust	Flow	Water level	Accelerometer, vibration and shock	Inclinometer and gyro	Geomagnetic	GMR, AMR and TMR	Inductive transducer	Capacitive touch	Resistive potentiometers	Optical encoder	Magnetic encoder	Photo interruptor	Ultrasonic	Passive Infrared (PIR)	Light convergent reflective	Magnetic proximity (reed and hall)	Current	Sunlight, ambient light and colour	Pulse oximetry (SpO ₂)	Microphone	Human vision		
	Temperature				Pressure				Gas and liquid				Motion												Current	Optical	Sound	Image							
Abracon	•																																		
Alps Alpine							•	•	•								•	•				•	•							•					
Amphenol	•	•				•	•	•	•	•		•										•	•						•		•				
Bourns							•			•												•	•	•											
Bulgin																												•							
C&K Components																							•						•						
CTS	•		•	•								•	•	•				•					•		•			•		•					
Grayhill																							•	•					•						
Harvatek																								•							•				
Hirose																														•					
Innovative Sensor Technology			•	•						•			•																						
KEMET					•						•				•												•			•					
Kingstate																																		•	
Kyocera AVX	•		•				•	•												•									•						
Molex																				•				•			•								
Murata	•	•					•				•				•	•		•				•			•	•									
NIC	•																																		
Nidec Copal							•							•								•	•						•						
Omron						•	•	•	•	•	•	•	•	•	•					•				•			•			•		•	•	•	•
Panasonic Industry	•					•	•				•				•	•						•													
Panasonic Electric Works																								•			•								
PUI Audio																									•								•		
Pulse																														•					
Qinlon																									•										
TDK	•	•					•		•						•	•	•	•												•				•	•
TE Connectivity	•		•	•		•	•	•	•	•	•	•	•	•	•	•		•	•			•	•		•			•			•				
Vishay	•	•	•																			•	•												
Yageo	•	•																																	

AC-DC power supplies

	AC-DC controller IC's, start-up, isolators, Tx, CMC	Enclosed case panel mount	Open frame and U-frame with case/fan	Modular	DIN rail mount	Adaptors and external desktop chargers (incl. medical)	Board or chassis mounted	Brick type board mount	Conduction/convection cooled and fanless	CRPS data centre front-end rectifier	Higher output voltage 100-400Vdc	High power industrial / telecom	Medical EN60601-1 certified	Household EN 60335-1 certified	Battery chargers VRLA / Li-Ion / LiPo / LiFePO4	Battery chargers USB Type A, Type C	Battery chargers, smart high power	Power over Ethernet	Standard LED drivers (CC, CV, CP, CV-GC)	LED Drivers with Bluetooth (KNX, DALI)	LED emergency drivers with integrated batteries	LED modules and accessories	UV-C LED drivers & UV-C lamp ballasts
ABB Embedded Power																							
Aimtec																							
Advanced Energy (Artesyn / Excelsys)																							
Bel Power (Melcher)																							
CUI																							
Delta Electronics																							
Pulse (Egston)																							
Fulham																							
MEAN WELL																							
Murata																							

DC-DC converters

	Low power miniature isolated	Industrial	Bricks 50 - 1800W	Bricks IBC 200 - 1800W	Gate-drive DC-DC converters	Off-board chassis mount	Enclosed case panel mount	Open frame and U-frame with case	DIN rail	CRPS data centre front-end rectifier	Higher input voltage 100-2000Vdc	Higher output voltage 300-1200Vdc	Medical (certified)	Isolation amplifiers and interfaces	Transceiver modules (CAN-RS485/Z32/UART-SP)	Railway and transportation	LED DC-DC converters	Switching buck regulators	Switching buck-boost regulators	Non-isolated bricks 100 - 3000W	DC filters input / output	Micro Point of Load 0.5 - 25A	Digital Point of Load 2 - 180A	Analog Point of Load (DOSA/POLA)	Power block modules	Direct conversion isolated	Intermediate Bus converters	High power non-isolated buck-boost	Automotive Point of Load buck/buck-boost		
	DC-DC ISOLATED																NON-ISOLATED & POINT OF LOAD														
ABB Embedded																															
Aimtec																															
Advanced Energy (Artesyn)																															
Bel Power (Melcher)																															
Cyntec																															
Delta Electronics																															
Eaton																															
Flex Power Modules																															
Fulham																															
MEAN WELL																															
Murata																															
TDK (Faraday)																															

Wireless Antenna Wireless charging

	RFID	NFC	ANT	Bluetooth	Zigbee	Thread	WiFi	LoRa	SigFox	LTE cat. M1	NB-IoT	GNSS	Chip	GSM and LTE	WLAN and WiFi	NFC	ISM, Zigbee and Bluetooth	GPS and data	Small cell	DAS	Tx coil units (WPC)	Rx coil units	Tx modules	Tx or Rx coils	
	Wireless												Antenna							Wireless charging					
Abracon													•	•	•	•	•	•	•		•	•		•	
Alps Alpine				•			•					•													
Amphenol														•	•	•	•	•	•	•	•	•	•		
Fujitsu				•																					
Kyocera AVX								•					•	•	•	•	•	•				•	•	•	
Molex													•	•	•	•	•	•				•	•		
Murata	•	•	•	•			•	•	•	•	•			•		•									
Panasonic Industry	•	•		•	•	•	•																		
Pulse													•	•	•	•	•	•	•	•	•	•	•	•	
TDK													•			•	•					•	•	•	•
TE Connectivity													•	•	•	•	•	•	•	•					
Vishay													•		•		•	•				•	•		
Yageo													•	•	•		•	•							

Offices

AUSTRIA

Avnet Abacus Vienna
Avnet EMG Elektronische
Bauelemente GmbH
Grünbergstraße 15/1/4.OG
1120 Wien / Austria
Phone: +43 1 86642 0
wien@avnet-abacus.eu

BELARUS

c/o Avnet Abacus Russia
Office 24, Building 2
10 Korovinskoye Shosse,
127486 Moscow
Phone: +7 (495) 737 3688
Fax: +7 (495) 737 3686
belarus@avnet-abacus.eu

BELGIUM

De Kleetlaan 3
1831 Diegem
Phone: +32 2 227 2000
diegem@avnet-abacus.eu

BULGARIA

c/o Avnet Abacus Romania
4 Gara Herastrau,
Building B, 2nd Floor RO-020334
Bucharest
Phone: +4021 528 16 90
bulgaria@avnet-abacus.eu

CROATIA

c/o Avnet Abacus Slovenia
Dunajska Cesta 167
1000 Ljubljana
Phone: +386 (0)1 560 97 54
Fax: +386 (0)1 560 98 78
croatia@avnet-abacus.eu

CZECH REPUBLIC

Amazon Court Karolinska 661/4
CZ-18600 Prague Czech Republic
Phone: +420 234 091 011
Fax: +420 234 091 010
praha@avnet-abacus.eu

DENMARK

Knudlundvej 24 DK-8653 Them
Phone: +45 86 84 84 84
Fax: +45 86 84 82 44
them@avnet-abacus.eu

Lyskær 9, DK-2730 Herlev
Phone: +45 86 84 84 84
Fax: +45 43 29 37 00
herlev@avnet-abacus.eu

EGYPT

c/o Avnet Abacus Turkey
Tatlısu Mahallesi Pakdil
Sokak No: 7 Kat: 2 34774
Umraniye Istanbul Türkiye
Phone: +90 216 52 88 370
Fax: +90 216 52 88 377
egypt@avnet-abacus.eu

ESTONIA

Suur-Jõe 63, Pärnu,
80042 Pärnu Maakond,
Estonia
Phone: +372 56637737
paernu@avnet-abacus.eu

FINLAND

Klovinpellontie 1-3
Tower 1 Floor 6
FI-02180 Espoo
Phone: +358 (0) 207 499 220
Fax: +358 (0) 207 499 240
espoo@avnet-abacus.eu

FRANCE

Le Copernic
12 rue Jean Bart
91300 Massy, Paris
Phone: +33 (0) 1 6447 2929
Fax: +33 (0) 1 6447 9150
paris@avnet-abacus.eu

8 chemin de la Terrasse
Bat D 1er étage
31500 Toulouse
Phone: +33 (0) 5 6247 4787
Fax: +33 (0) 5 6247 4761
toulouse@avnet-abacus.eu

16 C Rue de Jouanet
F- 35700 RENNES
Phone: +33 (0) 2 9983 7720
Fax: +33 (0) 2 9983 4829
rennes@avnet-abacus.eu

Parc Club du Moulin à Vent
Bât 10, 33 rue du Dr. G Lévy
F-69693 Vénissieux Cedex, Lyon
Phone: +33 (0) 4 7877 1370
Fax: +33 (0) 4 7877 1391
lyon@avnet-abacus.eu

GERMANY

Kaiserin-Augusta-Allee 14
D - 10533 Berlin
Phone: +49 (0) 30 790 997 0
Fax: +49 (0) 30 790997 51
berlin@avnet-abacus.eu

Industriestr. 16
76297 Stutensee
Phone: +49 (0)7249 910 149
Fax: +49 (0)7249 910 177
stutensee@avnet-abacus.eu

Wilhelmstr. 1,
D-59439 Holzwickede / Dortmund
Phone: +49 (0) 2301 2959 27
Fax: +49 (0) 2301 2959 29
dortmund@avnet-abacus.eu

Flughafenstrasse 52a
D - 22335 Hamburg
Phone: +49 (0) 40 608 23 59 0
Fax: +49 (0) 40 608 23 59 20
hamburg@avnet-abacus.eu

Einsteinring 1
85609 Dornach / Munich
Phone: +49 (0) 8121 777 03
Fax: +49 (0) 8121 777 531
muenchen@avnet-abacus.eu

Lina-Ammon-Str. 19 b
D-90471 Nürnberg
Phone: +49 (0) 911 244 250
Fax: +49 (0) 911 244 25 25
nuernberg@avnet-abacus.eu

Neue Ramtelstr. 4
D-71229 Leonberg
Phone: +49 7152 3009 70
Fax: +49 7152 3009 96
stuttgart@avnet-abacus.eu

Gaubstraße 10 D-31275 Lehrte
Phone: +49(0) 5132 5099 0
Fax: +49(0) 5132 5099 76
lehrte@avnet-abacus.eu

GREECE

c/o Avnet Abacus Serbia
Milentija Popovića 5B,
Floors 6-8 Belgrade RS11070
Phone: +381 11 4022302
Fax: +381 11 4049900
belgrade@avnet-abacus.eu

HUNGARY

c/o Avnet Abacus Czech Republic
GreenPoint Offices,
Blok F Turcianska 2 SK-82109,
Bratislava
Phone: +421 232 242 608
Fax: +421 2 32 1111 40
budapest@avnet-abacus.eu

IRELAND

c/o Avnet Abacus Bolton
Oceanic Building
Waters Meeting Road
Bolton BL1 8SW
Phone: +44 (0)1204 547170
Fax: +44 (0)1204 547171
bolton@avnet.eu

ISRAEL

Avnet Abacus Israel
1 Habrosh Street
Bney Dror 4581500
Phone: 972-9-778-0280
Israel@avnet-abacus.eu

ITALY

Via Manzoni 44
I-20095 Cusano Milanino (Milano)
Phone: +39 02 660 921
Fax: +39 02 66092 332
milano@avnet-abacus.eu

Viale dell'industria
23 I-35129 Padova
Phone: +39 049 7800 381
Fax: +39 049 7730 36
padova@avnet-abacus.eu

Via Scaglia Est, 31/33
41126 Modena
Phone: +39 059 34891
Fax: +39 059 344993
modena@avnet-abacus.eu

Via Panciatichi 40/11
I-50127 Firenze
Phone: +39 055 436 1928
Fax: +39 055 428 8810
firenze@avnet-abacus.eu

LATVIA

c/o Avnet Abacus Poland
Plac Solny 16
PL-50-062 Wroclaw
Phone: +48 71 34 205 99
Fax: +48 71 34 229 10
latvia@avnet-abacus.eu

LITHUANIA

c/o Avnet Abacus Poland
Plac Solny 16
PL-50-062 Wroclaw
Phone: +48 71 34 205 99
Fax: +48 71 34 229 10
lithuania@avnet-abacus.eu

NETHERLANDS

Stadionstraat 2, 6th fl. NL-4815
NG Breda
Phone: +31 (0) 76 57 22 300
Fax: +31 (0) 76 57 22 303
breda@avnet-abacus.eu

NORWAY

Olaf Helsetsvæi 6,
0694 Oslo Norway
Phone: +47 (0) 94 89 53 73
oslo@avnet-abacus.eu

POLAND

Plac Solny 16
PL-50-062 Wroclaw
Phone: +48 71 34 205 99
Fax: +48 71 34 229 10
wroclaw@avnet-abacus.eu

PORTUGAL

Tower Plaza, Rot. Eng. Edgar
Cardoso,
23, Pl. 14, Sala E
PT-4400-676 Vila Nova de Gaia
Phone: +351 223 779502
Fax: +351 223 779503
portugal@avnet-abacus.eu

ROMANIA

4 Gara Herastrau, Building B,
2nd Floor
RO-020334 Bucharest
Phone: +4021 528 16 90
romania@avnet-abacus.eu

RUSSIA

49A Tatischeva Street,
Ekaterinburg
RUS-620028
Phone: +7 (912) 650 1944
Ekaterinburg@avnet-abacus.eu

Office 24, Building 2

10 Korovinskoye Shosse
127486 Moscow
Phone: +7 (495) 737 3688
Fax: +7 (495) 737 3686
moscow@avnet-abacus.eu

SERBIA

Milentija Popovića 5B, Floors 6-8
Belgrade RS11070
Phone: +381 11 4022302
Fax: +381 11 4049900
belgrade@avnet-abacus.eu

SLOVAKIA

GreenPoint Offices, Blok F
Turcianska 2
SK-82109, Bratislava
Phone: +421 232 242 608
Fax: +421 2 32 1111 40
slovakia@avnet-abacus.eu

SLOVENIA

Dunajska Cesta 167
1000 Ljubljana
Phone: +386 (0)1 560 97 54
Fax: +386 (0)1 560 98 78
ljubljana@avnet-abacus.eu

SOUTH AFRICA

Block 13,
Pinewood Office Park
33 Riley Road Woodmead
2191 Sandton, Johannesburg
Phone: +27 (0) 10 447 0184
avnet-abacus-sales-southafrica@avnet.eu

Belmont Office Park
1st Floor, Unit 0030
Belmont Road, Rondebosch
Cape Town 7700
Phone: +27 (0) 21 200 8685
avnet-abacus-sales-southafrica@avnet.eu

33 Shelbourne Avenue La Lucia,
4051 Umhlanga
KwaZulu-Natal
Phone: +27 (0) 31 9405006
avnet-abacus-sales-southafrica@avnet.eu

SPAIN

NyN Tower, C/ Tarragona,
149-157, Floor 19
ES-08014 Barcelona
Phone: +34 (0) 93 327 85 50
Fax: +34 (0) 93 425 05 44
barcelona@avnet-abacus.eu

Plaza Zabalgane 12 Bajo Izda,
Galdakao / Vizcaya
ES -48960 Bilbao
Phone: +34 (0) 94 457 0044
Fax: +34 (0) 94 456 8855
bilbao@avnet-abacus.eu

SWEDEN

Löfströms Allé 5,
Sundbyberg, Box 1830,
SE-171 27 Solna
Phone: +46 (0) 858 746200
Fax: +46 (0) 858 746 001
stockholm@avnet-abacus.eu

SWITZERLAND

Bernstrasse 394
CH-8953 Dietikon
Phone: +41 (0) 43 322 49 90
Fax: +41 (0) 43 322 49 99
zurich@avnet-abacus.eu

TURKEY

Tatlısu Mahallesi Pakdil
Sokak No: 7 Kat: 2 34774
Umraniye Istanbul Türkiye
Phone: +90 216 52 88 370
Fax: +90 216 52 88 377
istanbul@avnet-abacus.eu

UK

Building 5 Waltham Park
White Waltham
Maidenhead Berkshire SL6 3TN
Phone: +44 (0)1628 512900
Fax: +44 (0)1628 512999
maidenhead@avnet.eu

Oceanic Building
Waters Meeting Road
Bolton BL1 8SW
Phone: +44 (0)1204 547170
Fax: +44 (0)1204 547171
bolton@avnet.eu

UKRAINE

c/o Avnet Abacus Poland
Plac Solny 16
PL-50-062 Wroclaw
Phone: +48 71 34 205 99
Fax: +48 71 34 229 10
ukraine@avnet-abacus.eu

All trademarks and logos are the property of their respective owners. This document provides a brief overview only, no binding offers are intended. No guarantee as to the accuracy or completeness of any information. All information is subject to change, modifications and amendments without notice. Printed on FSC certified paper.