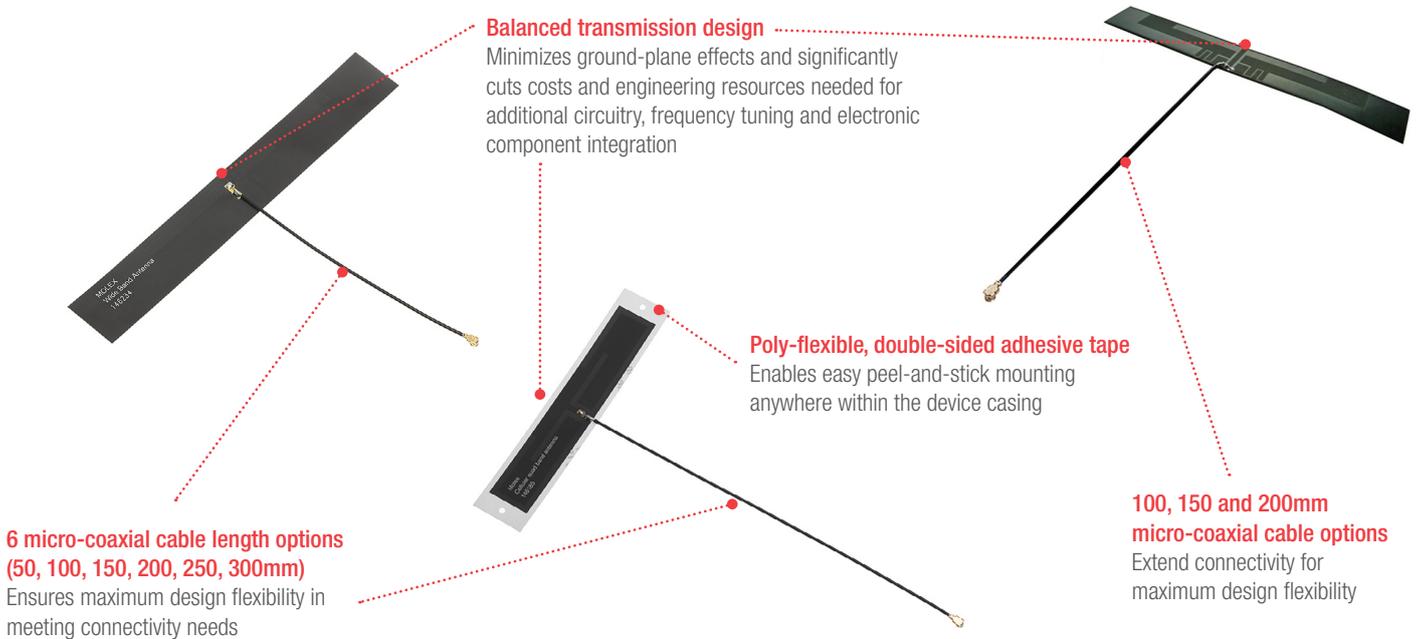


# Cellular Flexible Antennas



Wide-band antenna future-proofs wireless application developments to support evolving LTE and 4G cellular technologies

## Features and Benefits



## Applications

### Telecommunications/Networking

Infrastructure/Networking

### Industrial Automation

Smart grid concentrators

Smart meters

Home energy displays

Remote sensors

Alarm and monitoring systems

### Consumer

Home entertainment

Home office



Networking Servers



Alarm and Monitoring Systems



Home Entertainment Systems

## Specifications

*(Wide-band 698 to 960 MHz / 1.5 to 2.7 and 2.7 to 6 GHz Flexible Antenna 146234)*

### REFERENCE INFORMATION

Packaging: PCS film  
 Reference Platform (Ground size): 120 by 120 mm  
 PCB  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes  
 Ground clearance: Refer to Application Specification

### ELECTRICAL

Voltage (Watt): 2  
 Return Loss - S11(dB): <-4 (698 to 960MHz);  
 <-5 (1.5 to 2.7 and 2.7 to 6 GHz)  
 Average Total Radiation Efficiency(%): Refer to  
 Product Specification as these vary with cable  
 lengths for each of the 3 bands  
 Peak Gain (dBi): Refer to Product Specification  
 Polarization: Linear  
 Input Impedance (Ohms): 50

### MECHANICAL

Pull Force: >8N min.

### PHYSICAL

Thickness: 0.10mm (Flexible Material)  
 Operating Temperature: -30 to 85°C

*(Cellular Quad-band Flexible Antenna, Series 146185)*

### REFERENCE INFORMATION

Packaging: PE film  
 Mates With: Surface-mount, micro-coaxial jack  
 (Part Number: 73412-0110)  
 Designed In: mm  
 RoHS: Yes  
 Halogen Free: Yes  
 Glow Wire Compliant: No

### ELECTRICAL

Voltage (Watt): 2  
 Return Loss - S11(dB): <-4  
 Average Total Radiation Efficiency(%): >60  
 (824 to 960 MHz); >65 (1.7 to 2.7 GHz)  
 Peak Gain (dBi): 1.4 (824 to 960 MHz); 3.0  
 (1.7 to 2.7 GHz)  
 Polarization: Linear  
 Input Impedance (Ohms): 50

### MECHANICAL

Cable Pull Test: 8.0N min.

### PHYSICAL

Thickness: 0.10mm (Flexible Material)  
 Operating Temperature: -30 to 85°C

*(Multi(6)-Band Flexible Antenna, Series 105263)*

### REFERENCE INFORMATION

Packaging: Tray  
 Mates With: Micro-coaxial SMT Jack  
 (Part Number: 73412-0110)  
 Use In: Any device that requires a compact and  
 balanced transmission antenna  
 Designed In: mm  
 RoHS: Yes  
 Halogen Free: Yes  
 Glow Wire Compliant: No

### ELECTRICAL

Voltage (Watt): 2  
 Return Loss - S11(dB): <-6  
 Average Total Radiation Efficiency(%): >66  
 (824 to 960 MHz); >60 (1.71 to 2.70 GHz)  
 Peak Gain (dBi): 2.3 (824 to 960 MHz); 3.1  
 (1.7 to 2.7 GHz)

### MECHANICAL

Cable Pull Force: 5.0N min.

### PHYSICAL

Contact: Micro coaxial (<2.5mm mating height)  
 PCB Thickness: 0.10mm  
 Operating Temperature: -40 to 85°C

## Ordering Information

Series No.	Description	Frequency Bands	Dimension (mm)
<a href="#">146234</a>	Wide-band Cellular Flexible Antenna	698 to 960 MHz / 1.5 to 6 and 2.7 to 6 GHz	140.00 by 20.00 by 0.10mm
<a href="#">146185</a>	Cellular Quad-band Flexible Antenna	824 to 960 MHz; 1.71 to 2.7 GHz and 3 to 6 GHz	84.00 by 15.00 by 0.10mm
<a href="#">105263</a>	Multi(6)-band Flexible Antenna	824 to 960 MHz; 1.71 to 2.7 GHz	106.60 by 13.00 by 0.10mm

[www.molex.com/link/standard\\_antennas.html](http://www.molex.com/link/standard_antennas.html)