

INTRODUCTION



1.00 and 1.25mm (.039 and .049") Pitch SMT FFC/FPC Connectors

Series 49456 1.00mm Pitch
Series 49597 1.25mm Pitch

**High Voltage Type, ZIF
With BackFlip™ Actuator**

Molex's new 1.00 and 1.25mm pitch FFC/FPC connectors offer the highest voltage-carrying capabilities of any similar connectors in the market today. These connectors also offer lower process costs compared to wire-to-board options for applications such as LCD TVs using backlight units.

These new FPC connectors provide a low-profile alternative to wire-to-board versions while saving about 30% in comparative process costs. These connectors simplify board assembly by eliminating the need for harness making and application tooling; board assembly is further facilitated by having the connector delivered with the actuator open in embossed tape packaging, which reduces assembly steps.

These connectors can accept either FFC or FPC cable. They provide higher voltage carrying capabilities compared to standard FPC connectors in the same pitch, and equivalent or higher voltage than many wire-to-board systems used in similar applications.

Specifications:

- Current: 1.0A
- Voltage: 49456 (10pins): 125V
Voltage: 49597 (20pins): 300V
- Contact Resistance: 30 milliohms max.
- Insulation Resistance: 100 Megohms min.
- Dielectric Withstanding Voltage: 250V AC
- Durability: 250 cycles
- Flammability: UL 94V-0
- Contact Plating: Tin
- Operating Temperature: -40 to +105°C

Features

Benefits

- | | |
|--|--|
| • Robust BackFlip actuator | • Protects against actuator opening; easy operation |
| • FPC ear-tab locking feature | • Cable alignment, high retention force and easy actuation |
| • Higher voltage-carrying capabilities than similar FPCs | • Comparable voltage to many wire-to-board systems |
| • T-shape fitting nails | • Stronger PCB retention |
| • Holes in top of actuator | • Visual actuation confirmation |
| • Actuator packaged in open position | • Simplifies assembly process; vacuum pick-and-placeable |



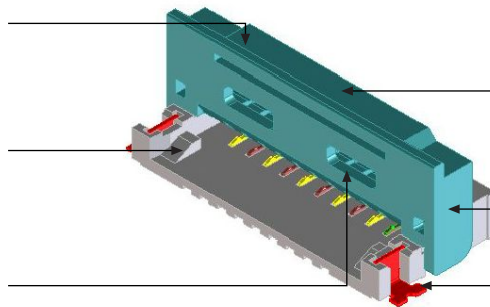
1.00mm Pitch,
10 Pins (49456)

1.25mm Pitch,
20 Pins (49597)

Top of actuator can accommodate pick-and-place

Housing ramp and notch accept cable tab for cable alignment, high retention force and easy actuation

Holes in actuator provide visual confirmation of actuation



Black or natural color actuator to fit design needs

Robust BackFlip actuator provides easy operation, tactile click feel, and protection against accidental opening

T-shaped fitting nails provide stronger PCB retention

* Note: accepts both FFC and FPC

MARKETS AND APPLICATIONS

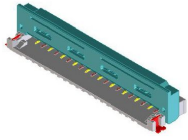
- LCD TV - With LED backlight units
- Flat Panel screens
- Home appliances
- Any application requiring high voltage and robust features



ORDERING INFORMATION



**1.00 and 1.25mm
(.039 and .049") Pitch
SMT FFC/FPC Connectors**

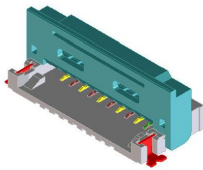


**Series 49456 1.00mm Pitch
Series 49597 1.25mm Pitch**

**High Voltage Type, ZIF
With BackFlip™ Actuator**

Order Number	Pitch	Circuits	Height	Width	Actuator Color	Halogen Free
49597-2007	1.25mm (.049")	20	2.80mm (.110")	8.00mm (.315")	Black	No
49597-2017					Natural	No

*Note: Contact Molex for Halogen-free versions.



Order Number	Pitch	Circuits	Height	Width	Actuator Color	Halogen Free
49456-1017	1.00mm (.039")	10	2.80mm (.110")	8.00mm (.315")	Black	No

molex®
one company › a world of innovation

Americas Headquarters
2222 Wellington Ct,
Lisle, Illinois 60532 USA
Tel: 1-800-78MOLEX
amerinfo@molex.com

Asia Pacific North Headquarters
Yamato, Kanagawa, Japan
Tel: 81-46-265-2325
apninfo@molex.com

Asia Pacific South Headquarters
Jurong, Singapore
Tel: 65-6-268-6868
apsinfo@molex.com

European Headquarters
Munich, Germany
Tel: 49-89-413092-0
euroinfo@molex.com

Corporate Headquarters
2222 Wellington Ct,
Lisle, Illinois 60532 USA
Tel: 630-969-4550

Visit our website at www.molex.com