**INTRODUCTION**

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**
- Robust BackFlip actuator
- FPC ear-tab locking feature
- Higher voltage-carrying capabilities than similar FPCs
- T-shape fitting nails
- Holes in top of actuator
- Actuator packaged in open position

**Benefits**
- Protects against actuator opening; easy operation
- Cable alignment, high retention force and easy actuation
- Comparable voltage to many wire-to-board systems
- Stronger PCB retention
- Visual actuation confirmation
- Simplifies assembly process; vacuum pick-and-placeable

**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

[High Voltage Type, ZIF With BackFlip™ Actuator](#)

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<table>
<thead>
<tr>
<th>Order Number</th>
<th>Pitch</th>
<th>Circuits</th>
<th>Height</th>
<th>Width</th>
<th>Actuator Color</th>
<th>Halogen Free</th>
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<tr>
<td>49597-2007</td>
<td>1.25mm (.049”)</td>
<td>20</td>
<td>2.80mm (.110”)</td>
<td>8.00mm (.315”)</td>
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<td>1.25mm (.049”)</td>
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*Note: Contact Molex for Halogen-free versions.*

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<tbody>
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<td>1.00mm (.039&quot;)</td>
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<td>2.80mm (.110&quot;)</td>
<td>8.00mm (.315&quot;)</td>
<td>Black</td>
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</tbody>
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*Visit our website at [www.molex.com](http://www.molex.com)*

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