

**Premo-Flex™ polyimide jumpers with etched-copper circuitry achieve tight tolerances for reliable connections to fine-pitch, 0.30mm connectors and are an off-the-shelf, ultra-flexible PCB interconnect solution that maximises board space and design flexibility in compact applications**

**molex®**

## Premo-Flex™ Etched Polyimide Jumpers

**Cable Thickness 0.12mm**  
15015 Gold, 0.30mm Pitch, Polyimide, 105°C

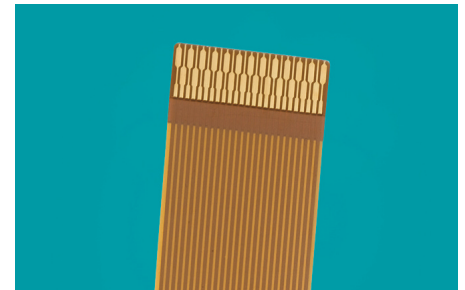
Premo-Flex™ jumpers, terminated to Zero Insertion Force (ZIF) FFC connectors, are an ultra-flexible interconnect solution for adjoining PC boards. With a polyimide substrate and etched-copper technology Molex can achieve the tight tolerances required for reliable connections with 0.30mm pitch, and below, microminiature connectors, that standard copper wire FFC jumpers cannot.

Premo-Flex™ etched polyimide jumpers are terminated with Molex's 0.30mm pitch, dual-contact FPC connectors, series 502598. With a shorter depth and length than similar competitive versions, the 502598 series FPC connector meets the needs of designers looking for a dual-contact ZIF connector that would enable them to utilize the same PCB pattern on adjoining parallel PCBs.

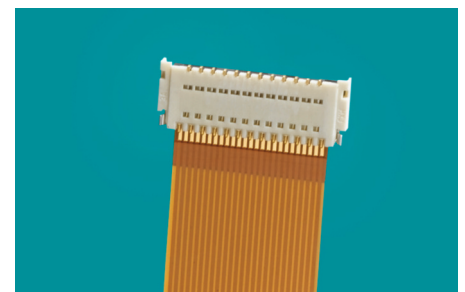
Etched polyimide jumpers terminated with 502598 connectors maximise board space and allow design flexibility for compact applications such as digital cameras and handheld medical equipment. Off-the-shelf standard circuit sizes and lengths avoid custom tooling costs and lead-times. For additional information visit:  
[www.molex.com/product/premoflex\\_ffc-fpc.html](http://www.molex.com/product/premoflex_ffc-fpc.html)

### FEATURES AND BENEFITS

- |   |   |
|---|---|
| • Etched-copper polyimide circuitry                   | • Achieves tight tolerances required for reliable connections with 0.30mm-pitch microminiature FPC connectors |
| • Polyimide substrate                                 | • High-temperature insulation material  |
| • Available in 8 circuit sizes and 5 standard lengths | • Off-the-shelf solutions and flexible design options   |
| • Cable termination thickness 0.12mm                  | • Compatible with Molex 0.30mm Pitch Easy-On™ BackFlip™ FPC Connector, series 502598                          |
| • Rated up to +105°C                                  | • Meets industry-standard requirements  |
| • Ensures simple ZIF assembly process                 | • Ideal for microminiature electrical connections between PCB's, display boards etc.                          |
| • Terminates to Molex FPC connector series 502598     | • 502598 series is a Core Micro Product; guaranteed minimum 10 year life-cycle                                |



Etched-Polyimide Copper Circuitry



Premo-Flex™ Etched Polyimide Jumpers with Easy-On™ BackFlip™ FPC Connector, Pitch, Series 502598



### MARKETS AND APPLICATIONS

- Data / networking / telecoms
  - Mobile phone / smart phone
  - Digital still camera
  - Tablet computer
- Medical
- Compact, handheld devices



Compact medical applications



Compact consumer applications

## SPECIFICATIONS

### Reference Information

Packaging: Box

Flame Resistance: UL 758 WV-1

Mates With: 0.30mm pitch FPC connectors, series 502598

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

### Mechanical

Temperature Rating: -40 to +105°C

Heat Resistance: 96 hours at +85°C

Moisture Resistance:

Mate with Molex series 502598 and expose to 40°C, relative humidity 98-95% for 96 hours. Part then conditioned at ambient for 1 hour, then specified measurements performed

Folding: Specimen to be folded manually at +180°C over a 4.00mm (.157") radius, min. 20 cycles

## Premo-Flex™ Etched Polyimide Jumpers

**Cable Thickness 0.12mm**

**15015 Gold, 0.30mm Pitch, Polyimide, 105°C**

### Electrical

Voltage: 50V AC/DC max.

Current: 0.2A max.

Dielectric Withstanding Voltage: 200V AC

for 1 minute, no disrupted discharge

Insulation Resistance: 50 Megohms/ km min.

Conductor Resistance: 60 milliohm max.

## ORDERING INFORMATION

| Circuits | Order No.  | Length inches | Length mm | Width inches | Width mm |
|----------|------------|---------------|-----------|--------------|----------|
| 23       | 15015-0223 | 2             | 50.8      | 0.283        | 7.2      |
|          | 15015-0423 | 4             | 101.6     |              |          |
|          | 15015-0623 | 6             | 152.4     |              |          |
|          | 15015-0823 | 8             | 203.2     |              |          |
|          | 15015-1023 | 10            | 254       |              |          |
| 25       | 15015-0225 | 2             | 50.8      | 0.307        | 7.8      |
|          | 15015-0425 | 4             | 101.6     |              |          |
|          | 15015-0625 | 6             | 152.4     |              |          |
|          | 15015-0825 | 8             | 203.2     |              |          |
|          | 15015-1025 | 10            | 254       |              |          |
| 27       | 15015-0227 | 2             | 50.8      | 0.331        | 8.4      |
|          | 15015-0427 | 4             | 101.6     |              |          |
|          | 15015-0627 | 6             | 152.4     |              |          |
|          | 15015-0827 | 8             | 203.2     |              |          |
|          | 15015-1027 | 10            | 254       |              |          |
| 29       | 15015-0229 | 2             | 50.8      | 0.354        | 9        |
|          | 15015-0429 | 4             | 101.6     |              |          |
|          | 15015-0629 | 6             | 152.4     |              |          |
|          | 15015-0829 | 8             | 203.2     |              |          |
|          | 15015-1029 | 10            | 254       |              |          |
| 33       | 15015-0233 | 2             | 50.8      | 0.403        | 10.2     |
|          | 15015-0433 | 4             | 101.6     |              |          |
|          | 15015-0633 | 6             | 152.4     |              |          |
|          | 15015-0833 | 8             | 203.2     |              |          |
|          | 15015-1033 | 10            | 254       |              |          |
| 39       | 15015-0239 | 2             | 50.8      | 0.472        | 12       |
|          | 15015-0439 | 4             | 101.6     |              |          |
|          | 15015-0639 | 6             | 152.4     |              |          |
|          | 15015-0839 | 8             | 203.2     |              |          |
|          | 15015-1039 | 10            | 254       |              |          |
| 45       | 15015-0245 | 2             | 50.8      | 0.543        | 13.8     |
|          | 15015-0445 | 4             | 101.6     |              |          |
|          | 15015-0645 | 6             | 152.4     |              |          |
|          | 15015-0845 | 8             | 203.2     |              |          |
|          | 15015-1045 | 10            | 254       |              |          |
| 51       | 15015-0251 | 2             | 50.8      | 0.614        | 15.6     |
|          | 15015-0451 | 4             | 101.6     |              |          |
|          | 15015-0651 | 6             | 152.4     |              |          |
|          | 15015-0851 | 8             | 203.2     |              |          |
|          | 15015-1051 | 10            | 254       |              |          |