

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

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

Premo-Flex™ Etched Polyimide Jumpers

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



Etched-Polyimide Copper Circuitry



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



FEATURES AND BENEFITS

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

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

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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		