Molex delivers high-performing Silver Flexible Circuit Solutions with finely spaced, narrow silver traces and complex components on polyester substrate, offering an economical alternative to traditionally etched copper traces on polyimide.

**Features and Benefits**

- **Polyester (PET) substrate**
  Provides flexible alternative to rigid printed circuit board (PCB). More cost-effective than polyimide.

- **Silver printing**
  Enables an economical substitution for copper etching.

- **Traces as narrow as 0.127mm (5.0 mils) and spacing as small as 0.127mm (5.0 mils), with the capability of even narrower and more finely spaced traces in select designs**
  Delivers low resistance and high conductivity, making this an effective circuit for a wide variety of low-power and -signal applications.

- **Does not require harsh chemicals or a waste treatment facility**
  Offers an environmentally friendly component.

- **Proprietary soldering technique**
  Supports attachment of fine-pitch (0.50mm) microprocessor-based components (ICs) on PET with traditional SMT processes.

- **UV-cured encapsulant**
  Protects solder joints, enabling them to withstand vibration and mechanical shock. Offers robust connection that tolerates a wide variety of applications.

- **Allows attachment of right-angle LEDs**
  Enables enhanced backlighting for user-interface applications.

**Applications**

- **Consumer/Home Appliance**
  Wearables (shirts, wrist-worn, clips, etc.)

- **Industrial**
  Building sensors

- **Medical**
  Diagnostic and therapeutic devices
Specifications

REFERENCE INFORMATION
RoHS: Yes
Halogen free: Yes
Shear test: ASTM-F1995-00
Mandrel test: ASTM-F3147-15

ELECTRICAL
Contact Molex for application-specific information

ENVIRONMENTAL PERFORMANCE
Thermal shock: MIL-STD 202F
Mechanical shock/vibration: MIL-STD 810G
Operating temperature: -20 to +85°C
Humidity: 90% RH NC per MIL-STD 202F
Flammability: UL 94 VTM-2

COMPONENT ATTACHMENT
Component types: SMT component types - Resistors, capacitors, diodes/LEDs, phototransistors, 7-segment displays, integrated circuits (ICs)

PRINTING
Trace width (min.): 0.127mm (5.0 mils)
Trace spacing (min.): 0.127mm (5.0 mils)
Circuit trace inks: Silver, Silver-Chloride

PHYSICAL
Substrate material: PET
Circuit size (max.): 0.61 by 0.66m (24 by 26") or 0.46m (18") by unlimited

Ordering Information

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www.molex.com/link/silverflexcircuit.html