

ELASTOWIRE Wrap Connector Board-to-Board Type

DESCRIPTION

Tyco Electronics' ELASTOWIRE connectors are a form of compression type connector designed to make redundant surface-to-surface connections between mating pad patterns on opposing PCB surfaces.

ELASTOWIRE connectors provide a robust solution for making blind-mate connections between printed circuit boards, flex circuits, Chip-On-Glass LCD modules and component-to-board applications within space-constrained products such as mobile phones, PDAs, MP3 players and other consumer or industrial products.

ELASTOWIRE connectors consist of a repeated pattern of wires adhered to a polymeric substrate that is, in turn, adhered to a core of silicone rubber. ELASTOWIRE connectors provide a good combination of electrical performance, reliability, economy and durability.

APPLICATIONS

- Mobile Phones
- PDAs
- MP3 Players
- Other Consumer products
- Other Industrial products

KEY FEATURES

- Gold plated wires
- Deflection force of 0.05Kg/mm² at 0.5mm deflection
- Long term reliability and durability
- RoHS compliant
- Readily customized with very low tooling investment
- One piece connector
- Custom prototype samples within 2 weeks

FOR MORE INFORMATION

Technical Support

Internet: www.elastomerictech.com
www.tycoelectronics.com

USA: 1-800-989-7829

Fax: 1-610-893-9377

E-mail:
etiapplicationseng@tycoelectronics.com

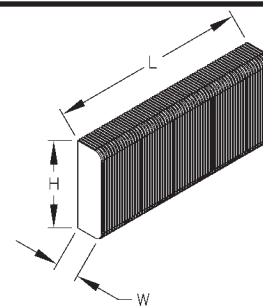
ELASTOWIRE Wrap Connector - Board-Board Type

PART NUMBER

Part Number: 5-1442008-5 Generic ELASTOWIRE Wrap Connector Sample

L 26.42mm [1.040"] x H 2.92mm [.115"] x W 1.19mm [.047"]

Nominal PCB separation: 2.54mm [.100"]



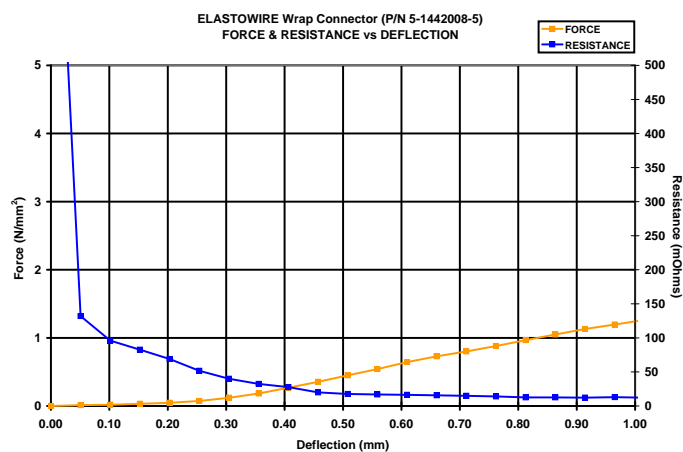
PHYSICAL PROPERTIES

- Board Spacing: 0.5mm [.020"] - 12.7mm [.500"]
- Minimum Pad Pitch: 0.8mm [.031"]
- Wire Conductor Dia: 0.05mm [.002"]



Redundant Wire Pattern

The standard pattern is 0.05mm [.002"] dia. wire on 0.1mm [.004"] pitch. On a PCB pad layout of 0.5mm [.020"] pads on 1.0mm [.040"] pitch, there would typically be 4 redundant wires making contact between each pair of mating pads.



ALTERNATIVE WIRE PITCHES

- 0.15mm [.006"]
- 0.2mm [.008"]
- 0.25mm [.010"]

TYPICAL ELECTRICAL PROPERTIES

- Contact Resistance¹ 35mΩ
- Dielectric Constant 3.1
- Insulation Resistance¹ 10¹² Ω min
- Dielectric Withstanding Voltage¹ 1000 Volts without breakdown or arcing
- Current Carrying Capacity¹ 1 A

¹ Test elastomer - 1.19mm [.047"] wide x 2.92mm [.115"] tall.
Test Boards - Au plated contact pads 0.5mm [.020"] wide on 1.0mm [.040"] pitch.

ENVIRONMENTAL PARAMETERS

- Operating Temperature: -40°C to +125°C
- Moisture 0 to 100% RH

Restriction on the use of Hazardous Substances (RoHS)

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NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

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- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree



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