



ELASTOWIRE Flat Connector Co-Planar Type

DESCRIPTION

Tyco Electronics' co-planar type of ELASTOWIRE connector provides a robust compression contact solution. With redundant gold plated wires on one side, flat ELASTOWIRE connectors make a low-profile bridging connection between mating pad patterns that are oriented adjacent to each other in the same plane.

The size and economy of ELASTOWIRE connectors make them an excellent choice for use within space-constrained products such as mobile phones, PDAs, MP3 players and other consumer or industrial products.

ELASTOWIRE connectors are a form of compression connector that consists of a redundant pattern of wires adhered to a polymeric substrate that is, in turn, adhered to a core of silicone rubber. The silicone rubber provides an even contact spring force.

ELASTOWIRE connectors provide an excellent 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
- Low resistance
- Deflection force of 0.05Kg/mm² at 0.5mm deflection
- Long term reliability and durability
- Ability to provide a low profile solution
- 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

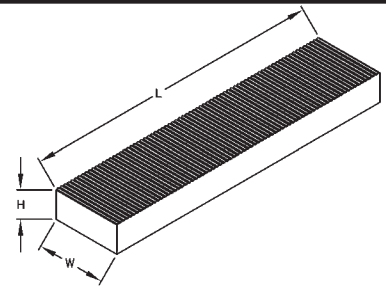
ELASTOWIRE Flat Connector - Co-Planar Type

PART NUMBER

Part Number: 6-1442008-7 Generic ELASTOWIRE Flat Connector Sample

L 30.4mm [1.197"] x W 3.5mm [.138"] x H 1.5mm [.059"]

0.05mm [.002"] diameter wires on 0.1mm [.004"] pitch



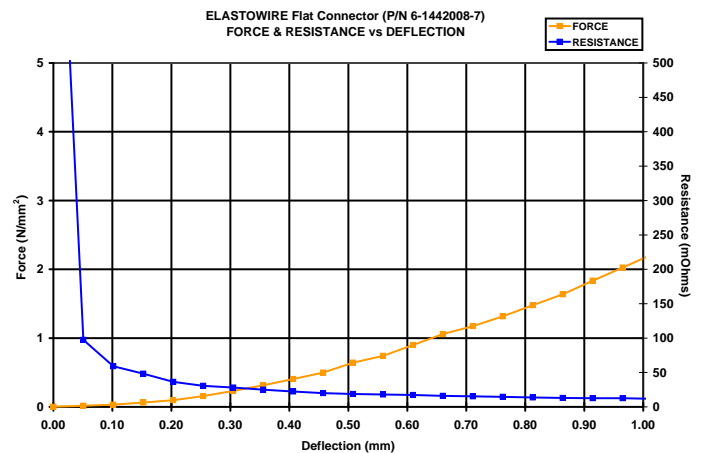
PHYSICAL PROPERTIES

- Height: 1.0mm [.040"] - 12.7mm [.500"]
- Minimum Pad Pitch: 0.6mm [.024"]
- Wire Conductor Dia: 0.05mm [.002"] standard
- Conductor Pitch: 0.1mm [.004"] standard
- Typical Clamping Force: See chart



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 20mΩ
- 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 - 3.5mm [.138"] wide x 1.5mm [.059"] thick.

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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- 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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