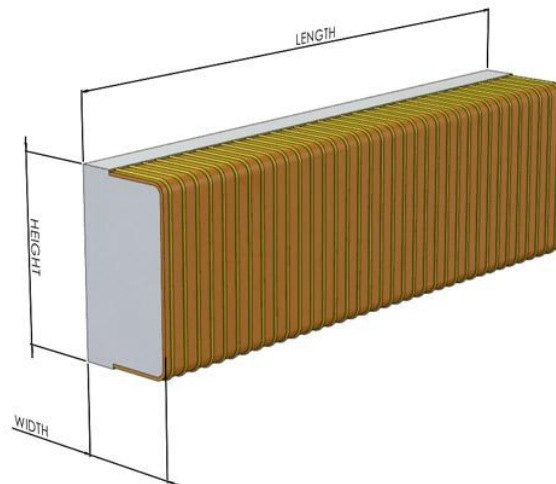


Series: Z-FILL Elastomeric Connector



See www.zaxisconnector.com for more information.



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1.0 OVERVIEW

The Z-FILL Series consists of conductive elastomer interconnects designed to provide reliable electrical connections between mating contact surfaces. Z-FILL products utilize fine conductive gold wires embedded within a compliant silicone elastomer matrix, allowing electrical conduction through the thickness (Z-axis) while maintaining electrical isolation in the X and Y directions.

Unlike traditional spring contacts, Z-FILL connectors provide a compliant pressure-contact interface capable of accommodating minor surface irregularities, manufacturing tolerances, and thermal expansion effects. The technology enables high-density interconnect solutions without soldering and is suitable for both production and test applications.

Z-FILL products are available in custom lengths, widths, heights, conductor pitches, and elastomer formulations to meet application-specific requirements.

2.0 TYPICAL APPLICATIONS

- Medical devices and diagnostic equipment
- Industrial automation and control systems
- Barcode scanners and imaging equipment
- Board-to-board interconnects
- LCD, OLED, and display interfaces
- Battery contact systems
- RF grounding and shielding applications
- Telecommunications equipment
- Embedded electronic assemblies
- Aerospace and defense electronics
- Portable and handheld electronic devices
- Custom OEM electronic assemblies



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3.0 DETAILED INFORMATION

3.1 Mechanical drawings, assembly drawings, and dimensional information are available upon request.

4.0 CONNECTOR PROPERTIES *

4.1 Electrical Properties:

Parameter	Value
Contact Resistance	< 20 mΩ per contact *
Current Rating	0.50 A per contact *
Insulation Resistance	100 MΩ Minimum *
Dielectric Withstanding Voltage	500 V rms typical
Inductance	< 0.05 nanohenries from 5 to 500 kHz

4.2 Mechanical Properties:

Parameter	Value
Length (L)	Custom
Width (W)	Custom
Height (H)	Custom
Compression Range	5% - 20%
Recommended Compression	10% *
Contact Pitch	Continuous or Grouped
Configuration	Linear, Matrix, and Custom Geometries
Contact Material	Gold Wire Elastomer

* Data is application specific. Please contact us with any questions.



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5.0 ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Operating Temperature	-65°F to +250°F
Humidity	95% RH Non-condensing
RoHS	Yes
REACH	Yes



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6.0 REVISION HISTORY

Rev	Date	Description	Author
A	2026-06-12	Initial release	JG
B	2026-09-04	Update temperature parameters	JG

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Disclaimer

Information contained in this document is believed to be accurate and reliable at the time of publication. Specifications, dimensions, materials, and performance characteristics are subject to change without notice. Product performance may vary depending on application-specific factors including pad geometry, surface finish, compression, environmental conditions, and operating parameters. Customers are responsible for validating suitability for their intended application.