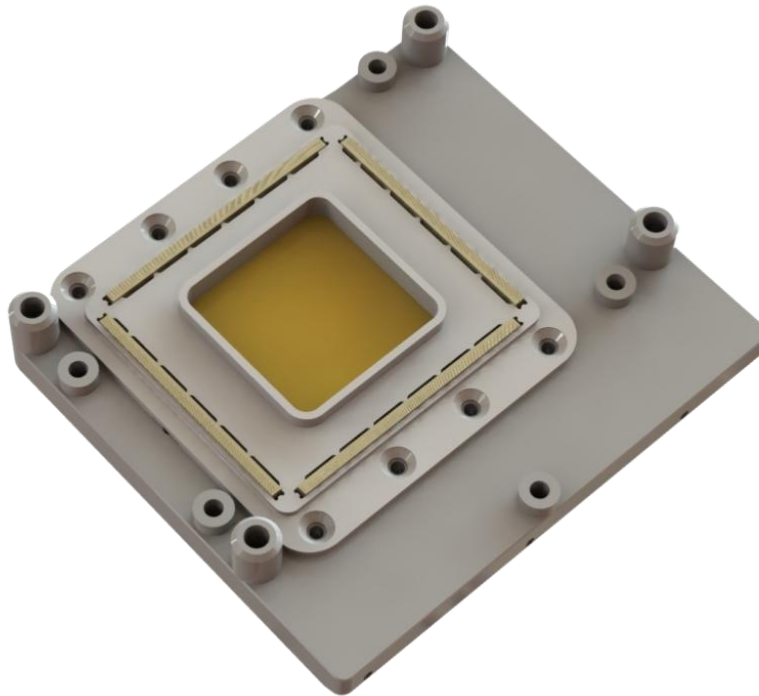


Series: ZCON-MX 1.00mm Low-Profile Array Connector



*Sales Illustration

See www.zaxisconnector.com for more information.



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1.0 SCOPE

- 1.1** This specification covers the performance, testing, and quality requirements for Z-Axis Connector Company's ZCON-MX Series elastomeric array connectors. The ZCON-MX Series is a family of low-profile array interconnects designed to provide a compliant, high-density electrical interface between parallel mating surfaces.

2.0 PRODUCT DESCRIPTION

- 2.1** The ZCON-MX Series utilizes Z-Fill conductive elastomer elements housed within a precision alignment frame to provide a compliant electrical interface between opposing contact arrays. The connector assembly is designed to accommodate minor surface irregularities while maintaining reliable electrical contact across high-density interconnect applications.

2.2 Features:

- Low-profile array connector design
- High-density contact arrangement
- Precision alignment hardware
- Compliant Z-Fill conductive elastomer technology
- No individual spring contacts
- Custom contact counts and configurations available
- Suitable for production and test applications

2.3 Compatible Platforms

- The ZCON-MX Series includes standard configurations designed to interface with industry-standard array connector footprints. Specific models may be configured as mechanical replacements for existing connector systems.

2.4 Technology:

Z-Fill conductive elastomer technology consists of closely spaced conductive elements embedded within a compliant elastomer matrix. Electrical conduction occurs through the thickness (Z-axis) of the connector while maintaining electrical isolation in the X and Y directions. This construction provides a reliable pressure-contact interface without the use of individual spring contacts.

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3.0 DETAILED INFORMATION

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

4.0 TESTING AND PARAMETERS

4.1 Electrical Parameters:

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 Specifications:

Parameter	Value
Pitch	1.00 mm
Connector Stacked Height	1.27 mm
Compression Range	5-20X%
Recommended Compression	10%
Housing Material	HTL Resin
Contact Material	Z-Fill Conductive Elastomer
Mounting Hardware	Stainless Steel

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

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5.0 ENVIORMENTAL SPECIFICATIONS

Parameter	Value
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C
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 ZCON photos	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.