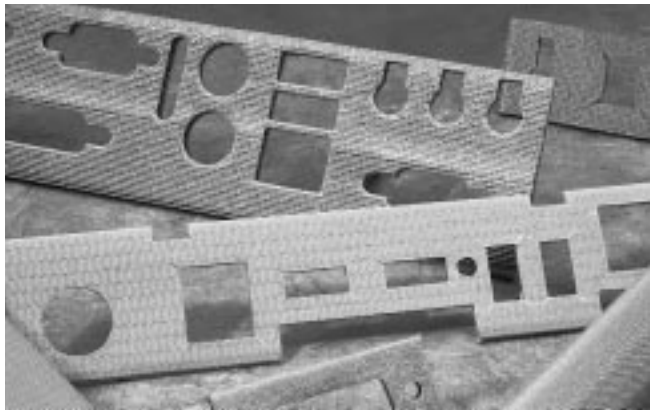
Fabric-Over-Foam I/O Gasket Selection Guide

The following pages have examples of standard I/O gaskets used in computer and telecommunication applications. If you have different requirements, our Engineering Department will design your gasket to the specifications that you supply. We will design your I/O from a fully detailed print, drawing file, or the actual panel to which the gasket is to be applied.



I/O Gasket Tolerances

Height tolerance:	± .020" (±0.5 mm)
Width tolerance:	± .020" (±0.5 mm)
Length tolerance:	± .020" (±0.5 mm)
Cutout tolerance:	± .020" (±0.5 mm)

If different tolerances are required, please consult Engineering. See back cover for contact information.

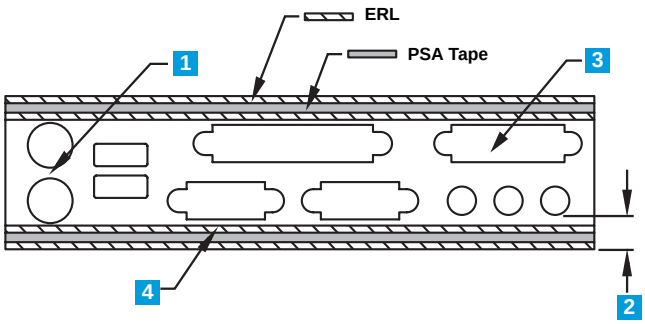
Basic I/O Gasket Design

1. Space between required cutouts should match or exceed 0.060" (1.5 mm).

2. Distance from the edge of a cutout should be at least 0.060" (1.5 mm) from the edge of the gasket. In most cases, a slot can be used in place of a hole that is positioned too close to the gasket edge.

3. All cutouts and locations are designed to the customer's specification.

4. Pressure-Sensitive Adhesive (PSA) and Extended Release Liner (ERL) can be applied in parallel with the long edge of the gasket.

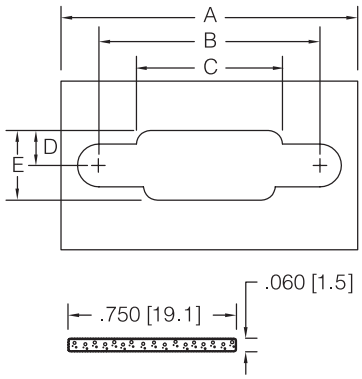


The recommended operating compression for Fabric-Over-Foam EMI gaskets will vary depending on the shape and size of the particular gasket. Typically, I/O gaskets should be compressed between 30 % and 50 % of the foam height.

All dimensions shown are in inches (millimeters) unless otherwise specified.

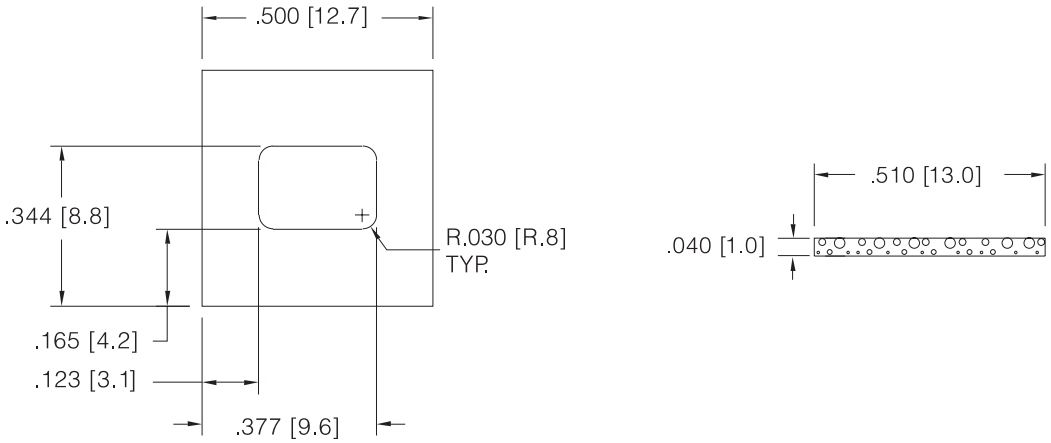
D-Sub Connector Series

Part No.	#Pins	A	B	C	D	E	Usage
4164-EE	9	1.320 (33.5)	.984 (25.0)	.650 (16.5)	.155 (4.0)	.310 (8.0)	Serial, Mouse, Com, Port
4164-FW	11, 15	1.640 (41.7)	1.310 (33.3)	.971 (24.7)	.155 (3.9)	.310 (7.9)	VGA, Game, Multi-media, Serial Port
4164-FY	25	2.204 (56.0)	1.865 (47.4)	1.500 (38.1)	.155 (3.9)	.310 (7.9)	Parallel, Serial, Scanner, Printers
4164-FZ	37	2.859 (72.6)	2.535 (64.4)	2.200 (55.9)	.155 (3.9)	.310 (7.9)	Serial Port
4164-GA	50	2.750 (69.9)	2.406 (61.1)	2.064 (52.4)	.211 (5.4)	.422 (10.7)	Serial Port



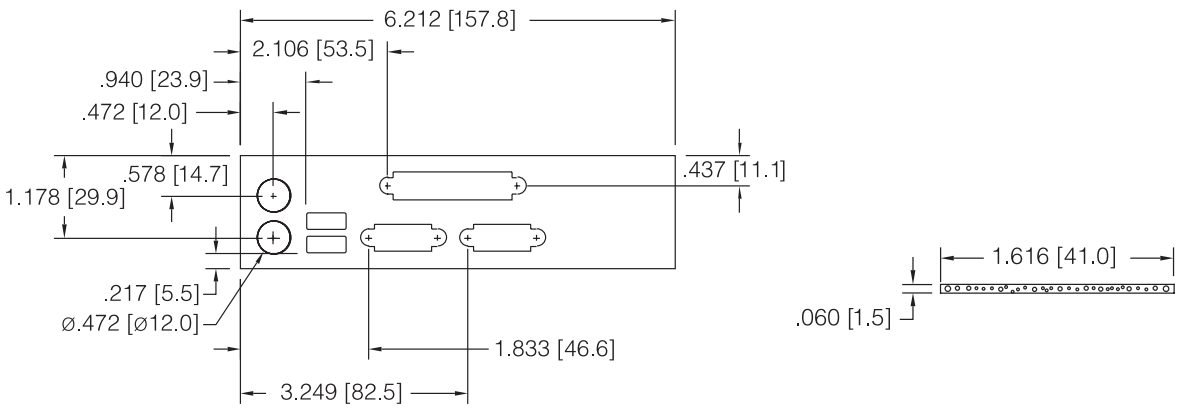
USB Port 4 Pin Connector, Part Number 4219-EB

Usage: Multi-use, hot plug-and-play



I/O Connector, Part Number 4231-EE

Usage: Standard PC Motherboard/Main Board (MB) I/O Shield



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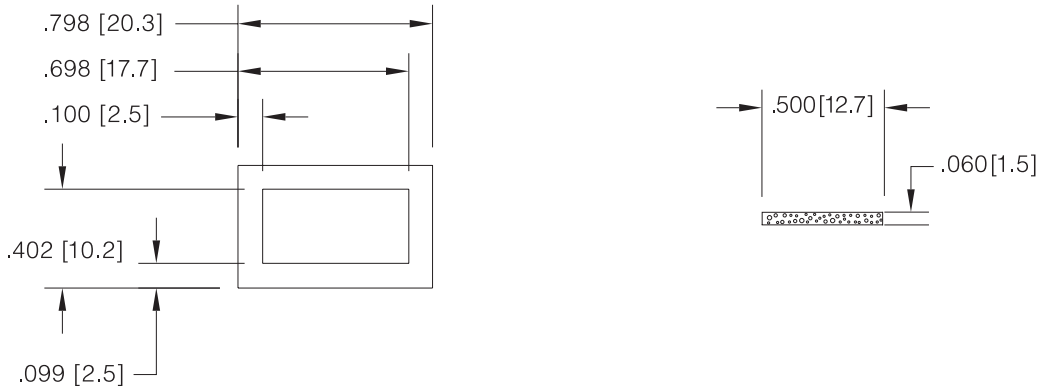
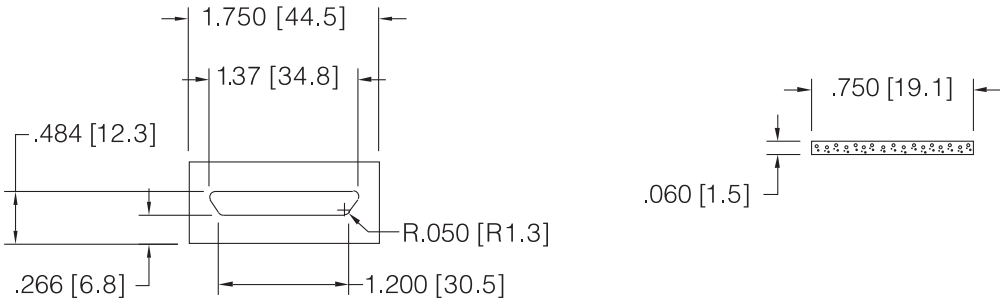
IEEE 1394 I/O 4 Pin Connector, Part Number 4051-EE

Usage: Plug-and-Play Serial Port (Digital Cameras, Printers, Keyboards, Mouse)



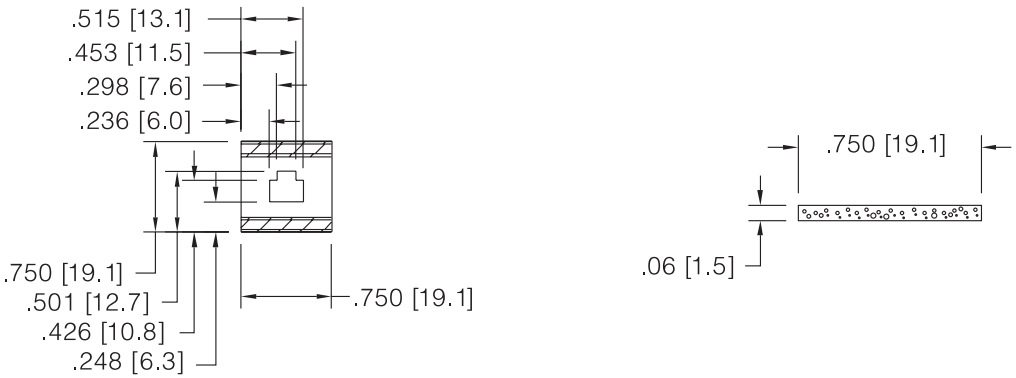
SCSI + 50 Pin Connector, Part Number 4164-FE

Usage: Peripheral, Hard Disk, CD-ROM



RJ-45 Connector, Part Number 4164-FH

Usage: Telecom, Ethernet Networking



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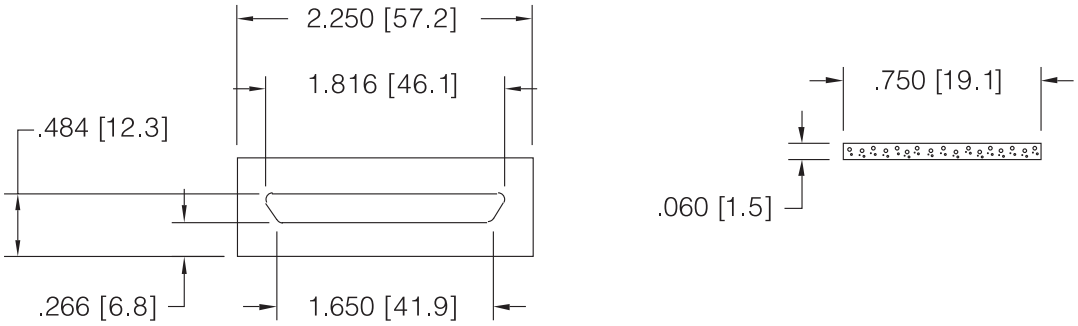
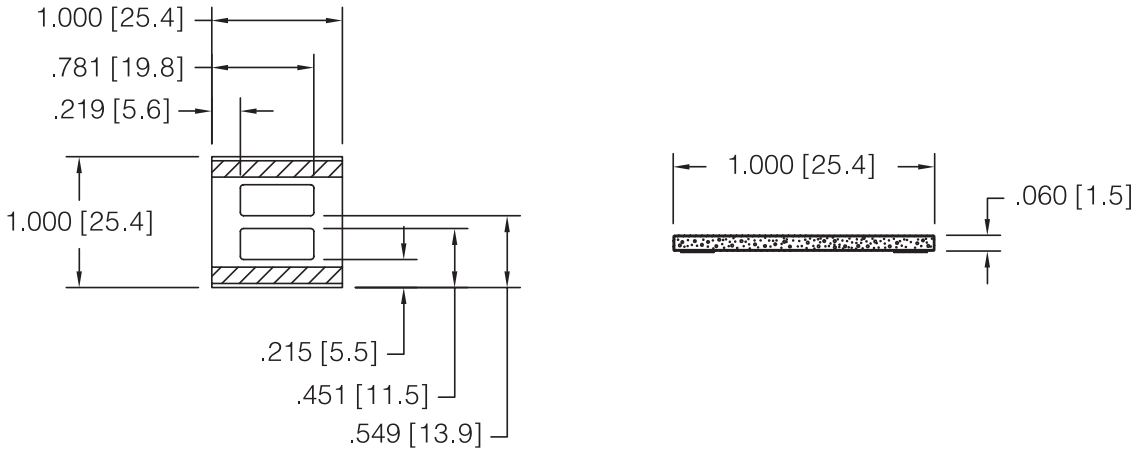
SCSI + 68 Pin Connector, Part Number 4164-FF

Usage: Peripheral, External Hard Drive



USB Port Connector, Part Number 4080-FK

Usage: Peripheral Port



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Fabric-Over-Foam Profile and I/O Ordering Information

Part Number Example:

Digits: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

4 6 9 3 - A B - 5 1 K - 0 1 2 0 0

Profile Shape & Size	Attachment & Part Specific Details	Core Materials	Flame Rating	Fabric Cover	Part Length
		5 = Urethane 3 = High Density Urethane 2 = TPE	0 = Not Rated 1 = UL V0 2 = UL HB	8, K, B = Ni/Cu Ripstop S = Sn/Cu Ripstop Y, 6 = Ni/Cu Knit Mesh 1 = Ni/Cu Taffeta	

* Certain combinations of materials may not be available for all Profiles or I/Os. Please consult the Engineering Department at Laird Technologies when unsure.

See back cover for contact information.

Digits 1 through 4

Designate profile number. Select profile or I/O and sizes from pages 9-13 (Profile) or 15-17 (I/O).

Digits 5 through 6

Designate part-specific attributes of the product including cutouts, notches, tape width, tape position and a variety of other customized details. A B is the default and usually designates Pressure Sensitive Adhesive centered on base. These digits will be supplied by Laird Technologies' Engineering personnel.

Digits 7 through 9

Designate the core materials, flame rating and fabric cover combinations. Select these from the recommended list in the table below. Other foam and fabric combinations are available, please consult Laird Technologies' Engineering Department. See page 8 for additional material performance data.

Digits 10 through 14

Designate the part length in inches to two decimal places (i.e., In the above example, the "01200" denotes a 12.00 inch (304.8 mm) long gasket).

Construction Options

Part Number Suffix Digits (Digits 7,8,9)	Foam Core	Gasket UL94 Flame Rating	Metallized Fabric Type	Benefits	Target Gasket
51K	Urethane	UL94 V0	Ni/Cu Ripstop	Flame Retardant, High Shear Resistant, Low Compression Set	I/O or Profile
51Y	Urethane	UL94 V0	Ni/Cu Knit Mesh	Flame Retardant, Low Compression Set	I/O
51S	Urethane	UL94 V0	Sn/Cu Ripstop	Flame Retardant, Shear Resistant, Low Compression Set	I/O or Profile
31K	High Density Urethane	UL94 V0	Ni/Cu Ripstop	Flame Retardant, Shear Resistant, Low Compression Set	Complex Shapes (C-Fold, T-Shaped, etc.)
221	TPE	UL94 HB	Ni/Cu Taffeta	Flame Retardant, Wide Variety of Profile Shapes	Profile
528	Urethane	UL94 HB	Ni/Cu Ripstop	Flame Retardant, Shear Resistant, Low Compression Set	I/O or Profile
50B	Urethane	Not Rated	Ni/Cu Ripstop	Low Cost, Shear Resistant, Low Compression Set	I/O or Profile
501	Urethane	Not Rated	Ni/Cu Taffeta	Low Cost, Low Compression Set	Profile
506	Urethane	Not Rated	Ni/Cu Knit Mesh	Low Cost, Low Compression Set	I/O

To order, contact our Sales Department.

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