

Mini-SAS

Amphenol ICC's Mini-SAS external I/O connector system consists of a die-cast metal cage and a Compact Multi-Lane SMT connector. It supports Fiber Channel and InfiniBand standards, making it the perfect solution to the ever-growing demand of high-speed mass storage systems, servers, and storage area networks. Providing four serial send/receive channels per port, this connector system provides signal speeds of 6Gb/s per channel. The cage is mounted separately to the body so that the stress imposed by insertion and removal of the cable plug does not affect the signal/body solder joints. Mini-SAS satisfies the requirements of the INCITS T10 SAS 2.0 and SAS 2.1, and provides reverse keying for active copper cables per SAS 2.0 and SAS 2.



TARGET MARKETS



TECHNICAL INFORMATION

MATERIAL

- Housing: Black color, Glass reinforced, Lead Free Solder Reflow Process Compatible Thermo Plastic
- Contacts Base Material: Phosphor Bronze
- Plating Solder Tails: Matte tin
- Plating Mating Area: Gold
- Base Material (Cage): Zinc alloy
- Plating (Cage): Nickel

MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 55.5 N max.
- Contact Normal Force: 100 grams
- PCB Thickness (Cage): 1.8 mm (0.070 in.) min.
- Unmating Force (Cage): 49.0 N max.

ELECTRICAL PERFORMANCE

- Operating Voltage: 30 VDC per contact
- Operating Current: 0.5 A per contact
- Differential Impedance: 100Ω +/- 10Ω

ENVIRONMENTAL

- Operating and (Storage) Temperature: -40°C to +85°C
- RoHS & Halogen-Free

TOOLING INFORMATION

- Light Pipe Options: Available

TARGET MARKETS/APPLICATIONS



Blade Server
Patch Panels
RAID
Rack-mount server
Router
Servers
Storage Rack
Workstation

PART NUMBER SELECTOR

Mini-SAS Connector

FS1

R26

X

0

0

X

Style	
R26	26 Position

Style	
2	30 μ" (0.76 μm) Gold Plating on Mating Area; 100 μ" (2.54 μm) Matte Tin on Tails Over Nickel Underplate
3	15 μ" (0.38 μm) Gold Plating on Mating Area; 100 μ" (2.54 μm) Matte Tin on Tails Over Nickel Underplate

Option	
0	Standard Connector
1	Connector with Hold Down Tabs

Option 2	
0	Standard Connector

Option 3	
0	Standard

Mini-SAS Cage

FSX

S

XX

1

X

XX

XX

Series Designation	
FS1	Standard
FS2	With SAS 2.0 Guide Keyway
FSA	With SAS 2.1 Guide Keyway

Style	
S	Shell

Size	
01	1X, 1°
F1	1X, 0°
02	2X, 1°
F2	2X, 0°
F4	4X, 0°

Plating	
1	Nickel

Keying Options	
0	No Key
1	Key #1
2	Key #2
4	Key #4 Universal SAS Port
6	Key #6
7	Key #7
24	Key #2 & #4 (SAS Out)
46	Key #4 & #6 (SAS In)
D22	Left Port Key #2 & #4 / Right Port Key #2 & #4
D66	Left Port Key #4 & #6 / Right Port Key #4 & #6
D26	Left Port Key #2 & #4 / Right Port Key #4 & #6
D62	Left Port Key #4 & #6 / Right Port Key #2 & #4

Light Pipe Option	
LP	2 Barrel Light Pipes (1 Light Pipe/Port)

Option 1	
C1	Conductive Elastomer Gasket, 8mm Long Mounting Screw, No Lock Washer
C2	Conductive Elastomer Gasket, No Mounting Screw
C3	Conductive Elastomer Gasket, 10mm Long Mounting Screw with Lock Washer
E1	Stainless Steel Gasket, 8mm Long Mounting Screw, No Lock Washer
E2	Stainless Steel Gasket, No Mounting Screw
E3	Stainless Steel Gasket, 10mm Long Mounting Screw, With Lock Washer
F1	Foam Gasket, 8mm Long Mounting Screw, No Lock Washer
F2	Foam Gasket, No Mounting Screw
F3	Foam Gasket, 10mm Long Mounting Screw, With Lock Washer

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