

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

Option

0

Standard Connector

1

Connector with Hold Down Tabs

Option 2

0

Standard Connector

Option 3

0

Standard

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

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