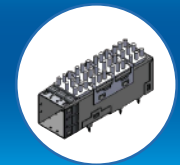


Mini-SAS (HD Series)

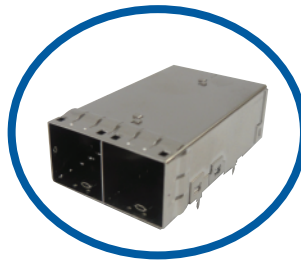


U92-A150-1D0A-10

Amphenol's Mini-SAS High Density Interconnect is the next generation SAS system, with 4x, 8x, and 16x cable-plugging options to provide faster data transmission and more bandwidth for end users. The Mini-SAS HD connector system has a 2-row, right-angle connector with 12 Gbps per channel. Each connector handles 4 lanes of data for up to 48 Gbps of total bandwidth. Ganged options are also available up to a 1x4 configuration for up to 192 Gbps of total bandwidth. This connector will mate with active copper and optical cable assemblies, as well as active pluggable modules for extended-length applications in data centers. Main applications for Mini-SAS HD include HBA Servers, storage devices, switches, and rack-mounted computers.



U92-A110-1001-10



U92-A210-1001-10



U92-A410-1001-30

Specification Highlights

The Mini-SAS HD interconnect system is comprised of a 36-position, 2-row press-fit connector, and a stamped and formed cage assembly as one unit complying with SFF-8644.

General Characteristics

- RoHS Compliant
- Industry Standard Footprint
- Industry Standard EIA-364

Mechanical Characteristics

- Durability: 250 Mating Cycles min

Electrical Characteristics

- Hot Swappable
- Operating Voltage: 30 V
- Operating Current: 0.5 A
- Differential Impedance: 100 Ω +/- 10 Ω
- DWV: 300 V AC
- Insulation Resistance: 1000 M Ω min
- EMI Spring Fingers for Superior EMI Performance

Packaging

- Tray Packaging: Cage and Connector Assembly
- Bulk Packaging: Dust Cover or Mounting Screw

Materials

- Cage
 - Base Material: Copper Alloy
 - Plating: Nickel
 - Heat Sink: Aluminum Alloy
 - Heat Sink Clip: Stainless Steel
 - Dust Cover: Thermoplastic
 - Mounting Screw: AISI 1010 Steel
 - EMI Spring Finger: Copper Alloy with Nickel Plating
- Connector
 - Contact Base Material: Copper Alloy
 - Contact Plating: Gold on Mating Area, Matte Tin on Termination
 - Housings: Glass Reinforced, Lead-Free Solder Reflow Process Compatible Thermoplastic, UL94V-0 Rated

Temperature Rating

- Operating Temperature: -40°C to +85°C
- Storage Temperature: -55°C to +105°C

Configurations (Rows x Ports per Row)

- 1x1
- 1x2
- 1x4

Options

- Dust Cover
- Heat Sink
- Light Pipe



U92-A410-1001-20

Ordering Information

Mini-SAS HD Combo (Cage / Connector)

U92 - A X X X - 1 X X X - 3 X

U92 SERIES DESIGNATION (RoHS)

A STYLE
A - One Row Cage 0 degrees

X NUMBER OF PORTS IN ROW
1 - 1x1
2 - 1x2
4 - 1x4

X HEAT SINK OPTION
1 - No Heat Sink or Clip Shipped
2 - Fin Style (Black Oxide) Heat Sink and Clip
5 - Pin Style (Nickel Plated) Heat Sink and Clip
A - Fin Style (Nickel Plated) Heat Sink and Clip
D - Pin-Fin Style (Black Oxide) Heat Sink and Clip
G - Pin Style (Black Oxide) Heat Sink and Clip
K - Pin Style (Chromate Passivation) Heat Sink and Clip
N - Pin-Fin Style (Nickel Plated) Heat Sink and Clip

X EMI Shielding
0 - Standard EMI Fingers
1 - Extended EMI Fingers

1 CAGE PLATING
1 - Nickel

MOUNTING SCREWS
0 - No Screws
1 - Mounting Screws (Standard Length of M2 x 0.4, 4.3 mm Long)

CONTACT PLATING
3 - Mating Area Plating 0.76 µm Gold Over 1.27 µm to 3.81 µm of Nickel; Press Fit Tail Area Plating 0.381 µm to 1.52 µm of Matte Tin Over 1.27 µm to 3.81 µm of Nickel

PACKAGING
1 - Tray Packaging
T - Tape and Reel Packaging
A - Tray Packaging Heat Sink and Clip or Light Pipe Shipped Assembled

LIGHT PIPE OPTION
0 - Standard
2 - 2 Round Light Pipes Per Port, on Top of the Cage

DUST COVER OPTION
0 - Without Dust Cover
D - With Dust Cover (Shipped Loose)