

# Mini-SAS HD Internal Connectors - G40H Series

### NEXT-GENERATION SAS STORAGE INTERFACE

Amphenol Mini-SAS High Density connector system is the next generation SAS system that provides faster data rates and more bandwidth. It provides double the port density of current Mini-SAS connectors with 1x1, 1x2 and 1x4 port options.

- Fully compliant with SFF-8643 specification
- Meets SAS 3.0 12Gb/s
- 85 $\Omega$  solution compliant with PCIe protocol
- Wafer design delivers better signal integrity
- Supports projected SAS 4.0 performance



#### **FEATURES**

- Complies with SFF8643 specification
- 0.75mm pitch connector system
- Meets SAS 3.0, 12Gb/s electrical performance
- Improved signal integrity and minimized crosstalk
- Eliminates need for mechanical key
- Pinouts map easily with existing Mini-SAS product
- Backward compatible with Mini-SAS
- Press-fit termination

#### **BENEFITS**

- Supports server and storage applications
- Suitable for high density applications
- Meets industry standards
- Lowers system latency and better system performance
- Easy to mate and unmate
- Supports SAS 2.1 performance as well
- Integrated press-fit pin design provides easy placement on PCB

### **TECHNICAL INFORMATION**

#### **MATERIAL**

 Housing: High Temperature Thermoplastic, UL 94V-0

• Contact Base Metal: Copper alloy

• Under-Plating: Nickel plating overall

• Shell: Stainless Steel

#### **MECHANICAL PERFORMANCE**

• Durability: 250 mating cycles

• Mating Force: 50N max.

• Unmating Force: 10N max.

#### **ELECTRICAL PERFORMANCE**

• Current Rating: 0.5A max. per contact

• Voltage Rating: 30V AC/ DC max.

Dielectric Withstanding Voltage: 300V DC

• Insulation Resistance:  $1000m\Omega$  min. • Differential Impedance:  $100\Omega \pm 10\Omega$ 

#### **ENVIRONMENTAL**

Humidity: 24 cycles between 25°C/80%RH

■ Temperature Life: EIA-364-17, 105°C for 336 hours

■ Thermal Shock: -55°C to 85°C, 10 cycles

#### **PACKAGING**

Tray/Tape and Reel available upon request

#### **SPECIFICATION**

■ Amphenol Product Specification: PS-7460

#### **APPROVALS & CERTIFICATION**

• UL

#### **TARGET MARKETS/APPLICATIONS**



Router Telecommunication

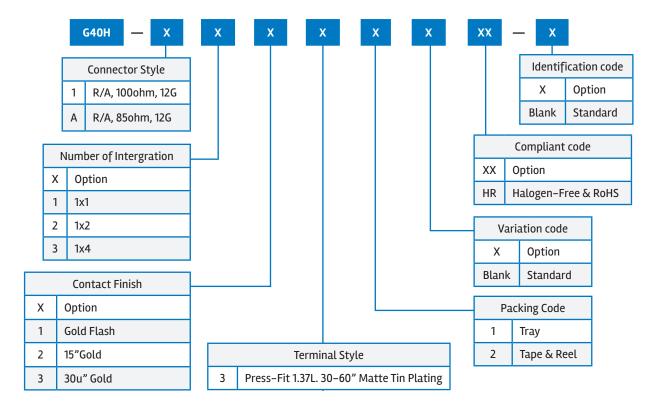


Networking Servers Storage

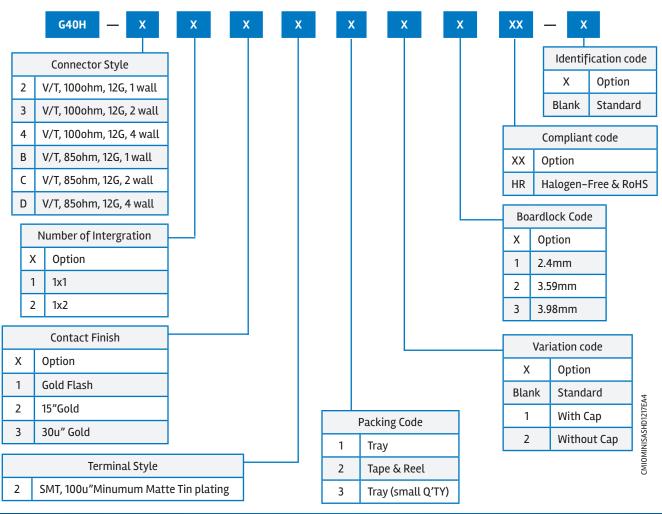


Test and Measurement Equipment Instrumentation and Medical

### PART NUMBER SELECTOR - RIGHT ANGLE



### PART NUMBER SELECTOR - VERTICAL



## **Mouser Electronics**

**Authorized Distributor** 

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### Amphenol:

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G40HA1331HR
G40HA2331HR
G40H3132211HR
G40H2132212HR
G40H3232211HR
G40H4232212HR

G40H3132212HR
G40H12331HR
G40HC232211HR
G40HB132211HR
G40H2232212HR
G40HC132212HR

G40HB132212HR
G40H11331HR
G40HB232212HR
G40H2232211HR
G40H4132211HR
G40H4232211HR

G40HD132211HR
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G40HA1332HR
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