HD Stacker[™]

Solder-free, rugged board-to-board stackable connectors



PERFORMANCE SPECIFICATIONS

Current rating: 3 Amp DWV: 638 VAC sea level Insulation resistance: 5000 Megohms minimum @ 500 VDC Contact resistance: 3 - 5 Milliohms Operating temperature: -65°C to +200°C Connector mating force (max): (4 ounces) X (number of contacts) Press-fit contact insertion force (max): (22.5 pounds) X (number of contacts) Durability: 500 mating cycles Contact wipe: .050" minimum

MATERIALS AND FINISHES

Insulator: Polyphenylene sulfide (PPS); meets NASA outgassing requirements. Contacts: Copper alloy, gold (50 to 100

microinches thick) over nickel (50 to 100 microinches thick) plating

Hardware: Copper alloy, nickel plated and/or 300 series stainless steel, passivated.

Encapsulant: Epoxy resin Hysol EE4215







PCB REQUIREMENTS

Board material: FR-4, Polyimide, or equivalent Board thickness: .058" minimum Drilled hole size: Ø.033" (#66 drill)

Plating material: Sn alloy or ENIG recommended Total plating thickness: .001" - .002"

QUALIFICATION TESTING / HIGH-SPEED PERFORMANCE

HD Stacker connectors were qualified in accordance with MIL-DTL-55302G testing for:

- Contact engagement/ separation and retention
- DWV

(.150"@ max insertion)

- Electrical resistance
- Mechanical vibration/shock
- Insulation resistance
- Thermal shock
- Contact resistance
- Contact wipe .150" min
- Humidity

HD Stacker insertion loss compared to PCIe Rev. 3

High-frequency electrical performace tests were performed for: Insertion loss, return loss, crosstalk, and time domain performance metrics including impedance and eye pattern.

Complete test reports are available at www.glenair.com/technical_information_test_reports

PCB LAYOUTS (COMPONENT SIDE)

