

Hercules™

High-Speed D-Sub



**Space-Grade
Versions Available**

The Hercules HS-D, High Speed D-Sub, embedded in a rugged rectangular MIL-STD-24308 style shell, provides both durable and high-bandwidth interconnect schemes suitable for Military, Aerospace, and ruggedized commercial high-bandwidth applications not previously accommodated by industry standard connectors. Hercules HS-D supports data rates in excess of 10 Gb/s and differential-pair signaling with low-skew pairs and shielding for EMI/RFI protection.



Features & Benefits

- Rugged lightweight machined MIL-DTL-24308 style shells with gasketing to provide IP67 and EMI protection with various plating finishes
- Differential pairs aligned in ground-signal-signal-ground layout
- Available as Plug-Cable Assemblies and Panel-Mount, Board-Mount Receptacles with SMT Tails
- Available in Shell Sizes DA, DB, DC, DD, and DE
- Available in positions 19, 31, 51, 75, and 108
- Matched impedance design of 100 ohm
- Cable types available in 24, 26, 28, and 30 AWG
- Jacket types available: LSZH, PVC, FEP, and Halar Expando
- Custom-length cable assemblies available
- Fully electrically tested

Specifications

Electrical

- Impedance: 100 \pm 15 ohms differential at 100ps rise time
- Cross talk: < -35 dB up to 5GHz from multiple aggressors
- Insertion Loss: < -1 dB up to 5 GHz
- Return Loss: < -10 dB up to 5 GHz
- Power Per Contact: 3 amp

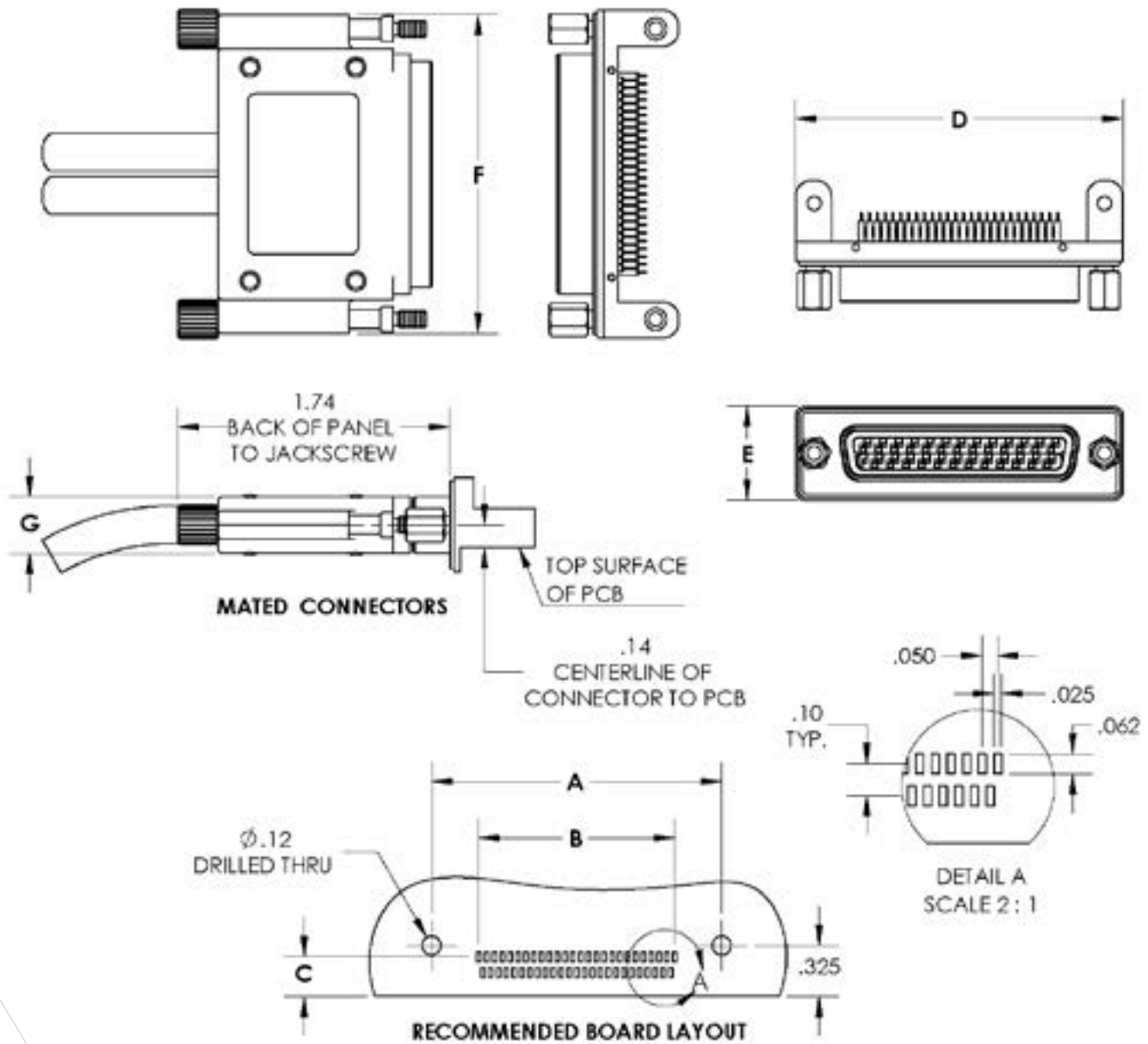
Mechanical

- Contact Material: Copper Alloy
- Standard Contact Finish: 50 μ -inch min AU
Over 100 μ -inch min Ni
- Contact Durability: 10,000 Cycles
- Shell Material: Aluminum Alloy / Zinc Alloy
- Shell Plating: Chromate Over Cadmium, Electroless Nickel

Environmental

- -40 °C to +125 °C





All dimensions in inches with conversions to metric

Shell Size	Number of Contacts	Number of Differential Pairs	A	B	C	D	E	F	G
DA (Ref. 9)	19	5 + 2 Spare	0.98 [24.89]	0.50 [11.43]	0.20 [5.15]	1.21 [30.73]	0.60 [15.24]	1.16 [29.46]	0.36 [9.14]
DA (Ref. 15)	31	9 + 3 Spare	1.31 [33.27]	0.75 [19.05]	0.20 [5.15]	1.54 [39.12]	0.60 [15.24]	1.49 [37.85]	0.36 [9.14]
DB (Ref. 25)	51	16 + 1 Spare	1.85 [46.99]	1.25 [31.75]	0.20 [5.15]	2.09 [53.09]	0.60 [15.24]	2.03 [51.56]	0.36 [9.14]
DC (Ref. 37)	75	24 + 1 Spare	2.49 [63.2]	1.85 [46.99]	0.20 [5.15]	2.73 [69.34]	0.60 [15.24]	2.68 [68.07]	0.36 [9.14]
DD (Ref. 50)*	108	34 + 3 Spare	2.41 [61.21]	1.80 [45.72]	2.99 [75.95]	2.64 [67.06]	0.70 [17.78]	2.59 [65.79]	0.46 [11.68]

* This size contains 3 rows of contacts.
All other sizes contain 2 rows of contacts

Contact Us!

1-888-MERITEC [637-4832] | OFFICE: 440-354-2100 | INFO@MERITEC.COM