

Product description

Smiths Interconnect's HPH Series is a high density signal PCB connector designed for harsh environments within the aerospace, defence and industrial market segments.

With a 0.6 mm contact diameter, the HPH Series comes in 3 to 6 row configurations and is available up to 303 signal contacts on a 1.901 mm staggered grid. Contacts are removable for ease of maintenance.

Using the proven Hypertac® hyperboloid contact system, the connectors ensure a low contact resistance under high levels of shocks and vibrations and over 2000 mating cycles. They provide low engagement and withdrawal force; long life and low rate of wear for high reliability and enhanced quality performance.

Additionally, the HPH Series supports a current rating of up to 8.5 A per contact

Technical characteristics

Current rating¹	4 A at 30°C rise, nominal ² 8.5 A at 30°C rise, single contact 8 A at 30°C rise, 2 adjacent contacts 7 A at 30 C rise, 4 adjacent contact
Contact resistance	7 mΩ maximum
Insulation	5 GΩ minimum at 500 Vdc
Mechanical endurance	In excess of 2000 operations
Engagement/withdrawal forces	0.42 N (1.5 oz) nominal per contact
Temperature	55 °C to 125 °C
Voltage rating	170 Vdc or AC peak nominal
Proof voltage	800 V minimum
Male pin diameter	0.6 mm nominal

Material

Insulator	Polyphenylene sulphide
Contact pin and socket	Copper alloy
Socket wires	Beryllium copper
Guides	Stainless steel
Contact plating	MIL-G-45204 gold plate
Vibration	Vibration testing to ESCC 3401 para 9.11 (peak level 15 g)
Shock	Shock testing to ESCC 3401 para 9.12 (peak level 100 g)

(1) For details, please contact Smiths Interconnect

(2) See *Current derating curves* on page 2