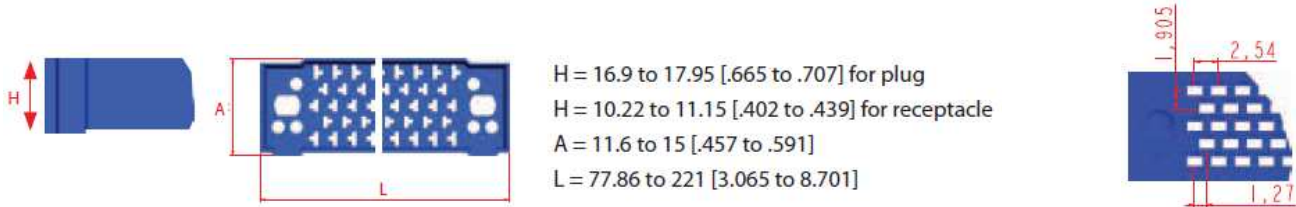




## SIHD >>> TECHNICAL SPECIFICATIONS

### DIMENSIONAL CHARACTERISTICS



### FEMALE CONTACT



#### Cross cavity by Amphenol: lateral displacement compatible

- Cross section of the lateral displacement of the male contact inside the female cavity
- Maintains 2 points of contact
- Allows a  $\pm 0.25$  [.010] lateral displacement
- No stress on solder joints or on the contact area

**Material:** beryllium copper (stamped)

#### Plating:

- Terminations: gold over nickel on crimp contacts (F1X1)  
tin lead or lead free on the other contacts (F1U1, F1U2, F1U3, F1TS, F1YC)
- Active contact area: gold over nickel

### MALE CONTACT



**Mating end size:**  $0.6 \times 1.2$  [.047 x .024]

**Contact section (mating side):**  $0.72 \text{ mm}^2$  [.001 in<sup>2</sup>]

**Material:** phosphorous bronze (stamped)

#### Plating:

- Terminations: gold over nickel on wire-wrap contacts (M1W3)  
tin lead or lead free on other contacts (M1YD, M1YC)
- Active contact area: gold over nickel

## MATERIALS

**Guiding devices:** passivated stainless steel 303

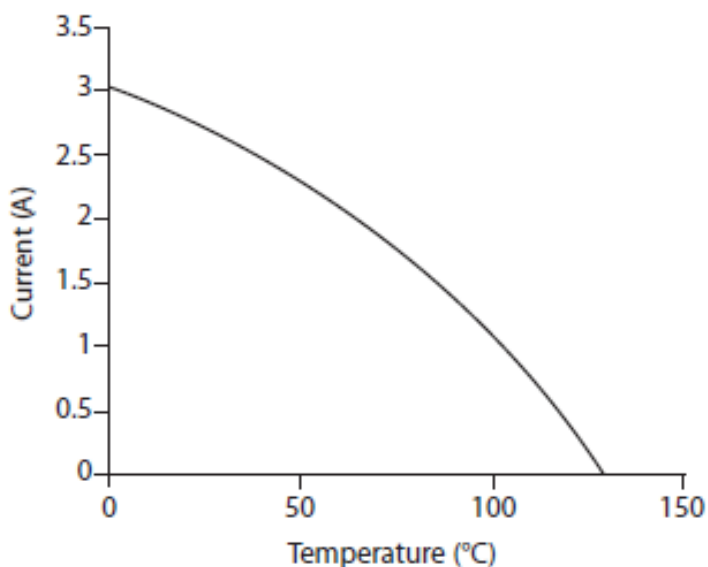
**Polarizing pins:** passivated stainless steel 303

**Plastic inserts:** thermoset DAP, 40% glass-fiber filled

## MECHANICAL, ENVIRONMENTAL AND ELECTRICAL CHARACTERISTICS

MECHANICAL CHARACTERISTICS	
Backoff <sup>1</sup> (mm)	1
Mating force per contact (N)	0.58 <sub>MAX</sub>
Unmating force per contact (N)	0.16 < F < 0.58
Durability cycles	500
Sinusoidal vibrations (10 to 2000 Hz) micro discontinuity 10 ns	
- unloaded PCB	20 g
- loaded PCB	10 g
Random vibrations (50 to 2000 Hz) micro discontinuity 10 ns	0,1 g <sup>2</sup> /Hz
Shocks 6ms 1/2 sinus micro discontinuity 10 ns	100g
Recommended tightening torques	
- nuts for Ø 2 mm screws, brass m.N	0.2
- nuts for Ø 2.5 mm screws, brass m.N	0.25
ENVIRONMENTAL CHARACTERISTICS	
Thermal shocks (°C)	-55 / +125
Salt Spray (hours)	96
Humidity	
Days	56
Temperature (°C)	40
Humidity rate (%)	90-95
ELECTRICAL CHARACTERISTICS	
Current rating per contacts (A)	3 - See derating curve
Insulation resistance (GΩ)	5 <sub>MIN</sub>
Contact resistance (mΩ)	12 <sub>MAX</sub>
Dielectric Withstanding Voltage (Vrms)	750*
Capacitance between contacts (pF)	2.5 <sub>MAX</sub>
Self induction (nH)	25 <sub>MAX</sub>
Immunity against noise of groundings for connectors with central ground strips	Noise ≤ 400mV for 0.1 A intensity per contact and signal rise time of 2ns

**Derating Curve**



1: When both connectors are fully mated, the backoff is the maximum distance the connectors can be unmated while functioning



Download our SIHD catalogue with all the technical datas on our dedicated website: [www.pcb-interconnect.com](http://www.pcb-interconnect.com)