# smiths connectors

# LSH SERIES

Rack and Panel Connectors









#### **FEATURES & BENEFITS**

- ▶ 200 A per contact
- ▶ 1 to 6 contacts
- Low mating forces
- ▶ Polyphenylene sulfide (PPS) insulators
- ▶ Radial float 0.049" (1.25 mm)
- ▶ 0.241" (6.12mm) contacts
- Threaded terminals
- ▶ Single row 0.925" (23.50mm) pitch
- ▶ Blind mate capability

The LSH rack and panel connector from Smiths Connectors is deployed across many different market segments including aerospace, automotive, industrial, test & measurement, and mass transit. The foundation upon which the LSH is built is the leading-edge Hypertac® hyperboloid technology. This world class interconnect technology ensures LSH connectors are immune to shock, vibration and fretting. In addition, it features the low insertion and extraction forces that are a catalyst for easy mating. The LSH Series delivers customers a life cycle that can be maintained for 100,000+ mating cycles and at an extremely low cost of ownership.

### TECHNICAL CHARACTERISTICS

| 1 Row |
|-------|
|       |

**Pitch** 0.925" (23.50 mm)

Contact Positions 1 to 6

Contact Termination Threaded

Nominal Current 200 A per contact

Nominal Pin Diameter 0.241" (6.12 mm)

Resistance < 0.10 milliohms

Contact Life Cycles 100,000

#### **MECHANICAL & ENVIRONMENTAL**

Contact Style/Termination

Operating Temperature

-55° to 125°C

Extraction Force

80 to 160 oz. max per contact

#### **MATERIALS & FINISHES**

| Insulator       | Polyphenylene sulfide (PPS) |  |  |
|-----------------|-----------------------------|--|--|
| Contact         | Beryllium copper            |  |  |
| Contact Plating | Gold over nickel            |  |  |

#### **ELECTRICAL**

| Current Rating        | 200 A per contact                     |  |
|-----------------------|---------------------------------------|--|
| DWV                   | 3,000 V RMS                           |  |
| Breakdown Voltage     | 4,000 V RMS                           |  |
| Insulation Resistance | > 10 <sup>6</sup> megaohms at 500 VDC |  |





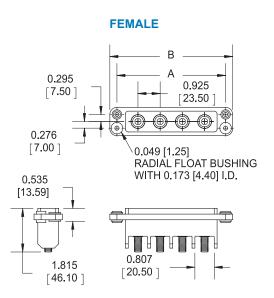


### **DIMENSIONS**

### **CONNECTOR DIMENSIONS**

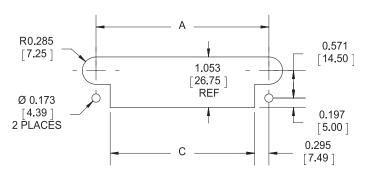
#### **MALE** 5/16-24UNF-2A THREAD 0.807 [20.50] M4.0x 0.70 **THREAD** 3.024 76.80 1.743 [44.28] Ø 0.239 0.902 [22.90] [6.08]

| NUMBER OF CONTACTS | А              | В              | С              |
|--------------------|----------------|----------------|----------------|
| 1                  | 1.752 [44.50]  | 2.342 [59.50]  | 1.161 [29.50]  |
| 2                  | 2.677 [68.00]  | 3.268 [83.00]  | 2.087 [53.00]  |
| 3                  | 3.602 [91.50]  | 4.193 [106.50] | 3.012 [76.50]  |
| 4                  | 4.528 [115.00] | 5.118 [130.00] | 3.937 [100.00] |
| 5                  | 5.453 [138.50] | 6.043 [153.50] | 4.862 [123.50] |
| 6                  | 6.378 [162.00] | 6.969 [177.00] | 5.787 [147.00] |



### MOUNTING DIMENSIONS

### As seen from wiring side of plug and mating side of receptacle







### **HOW TO ORDER**



- CONNECTOR SERIES (Fixed) LSH SERIES
- 2 NUMBER OF CONTACTS 0 1 0 2 0 3 0 4 0 5 0 6 CONTACTS
- 3 CONTACT GENDER FEMALE MALE
- 4 PLATING TG 10 μin GOLD (MIN) OVER NICKEL TAH 50 µin GOLD (MIN) OVER NICKEL ON MATING SURFACE, GOLD FLASH OVER NICKEL ON TERMINATION



## smiths connectors