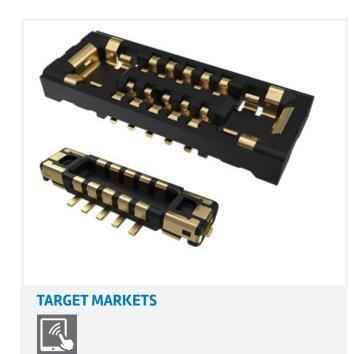


# 0.35 Pitch - 0.60 Stack Height, BTB, HRS-103 Series

# HIGH DENSITY MICRO BOARD-TO-BOARD

Horustech's HRS-103 series are 0.35mm pitch micro board-to-board connectors designed for high density applications. They support extreme low profile 0.60mm stack height and high current rating up to 5A. These connectors are offered in 4 to 60 positions. These meet USB 3.1 Gen 2 signal transmission rates and are ideal for consumer applications such as mobile phone, smart watch, smart glasses and VR/AR devices.

- Low profile connector design with fine pitch
- High current rating up to 5A
- Double contact points ensure enhanced contact stability
- Wide operating temperature range from -40°C to 85°C



### **FEATURES**

### Low profile connector design with fine pitch

- Self-cleaning design
- · High current rating up to 5A
- Double contact points
- High temperature thermoplastic housing
- Lead and halogen-free

#### **BENEFITS**

- Suitable for applications that have space constraint
- High removal and low insertion force
- Supports high power application requirements
- Enhanced contact stability
- Withstands wide operating temperature range (-40°C to 85°C)
- Meets environmental, health and safety requirements

### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Housing: High temperature plastic, black color (UL94V-0)
- Contact Terminal: Copper alloy, Au flash over Ni under plating
- Anchor-plate: Copper alloy, Au flash over Ni under plating

### **MECHANICAL PERFORMANCE**

• Durability: 10 mating cycles

No. of contacts	Mating force (N max.)		Un-mating force (N min.)	
	<b>1</b> st	10 <sup>th</sup>	<b>1</b> st	10 <sup>th</sup>
4	20.5		1.8	
6	24.0		1.9	
8	29		2	
10	34.0		2.1	
12	38.5		2.2	
14	42.5		2.4	
16	48.0		2.8	
20	49		2.9	
24	49.5		3.0	
30	51.5		3.5	
34	53.0		3.7	
40	55		4.1	
48	58		4.7	
50	58.5		4.9	
60	62		5.5	

### **ELECTRICAL PERFORMANCE**

- Voltage Rating: AC/DC 30V
- Current Rating:
  - Signal Pin: 0.3A
- Power Pin: 5A
- Contact Resistance:
- Signal Pin:  $80m\Omega$  max. (Initial); Power Pin:  $30m\Omega$  max. (Initial)
- Insulation Resistance: Initial:100M $\Omega$  min.; After: 50M $\Omega$  min.
- Dielectric Withstanding Voltage: No short or breakdown after AC 150V, 2mA, 1min.

#### **PACKAGING**

■ Tape & Reel

### **APPROVALS AND CERTIFICATIONS**

- UL 94V-0
- RoHS compliant

### **SPECIFICATION**

Product Specification: IS.EQC.172

### **ENVIRONMENTAL**

■ Operating Temperature Range: -40°C to +85°C

### **TARGET MARKETS/APPLICATIONS**



Mobile Phone Smart Watch TWS Smart Glasses VR/AR Devices

## PART NUMBER SELECTOR

