

## SPECIFICATION

Part No. : **RECE.20449.001E.01**

Product Name : IPEX MHF4 Receptacle  
Compatible with Murata HSC  
Mating Height: 1.2mm MAX  
10,000 pieces per reel

Photo :





## 1. Introduction

The Taoglas RECE.20449.001E.01 is a wire-to-board MHF4 SMT type Receptacle solution. IPEX MHF4 type is the smallest mini RF connector in the world. Lightweight and ultra-low profile (1.2mm MAX.) allows easy installation in limit spaces. With an operational frequency range of DC to 6 GHz, Taoglas RECE.20449.001E.01 offers superior performance and supports a wide range of miniature design purpose. Packaged on tape and reel, this receptacle is designed to be placed with automatic "pick and place" equipment.

The RECE.20449.001E.01 acts as a 50 Ohm transmission line to connect the micro-miniature RF connector to the printed circuit board. It is fully compatible with Hirose HSC connector.

Applicable Technology

IEEE 802.11 a/b/g/n, WiMAX, ZigBee, Bluetooth Wireless, etc.

## 2. Specifications

Electrical	
Operation Frequency	DC to 6 GHz
VSWR	1.3 Max at DC~3 GHz
	1.45 Max at 3~6 GHz
Nominal Impedance	50 Ohm
Rated Voltage	AC 60V
Contact Resistance	20m Ohm MAX. (signal) and 20m Ohm MAX. (Ground)
Withstand Voltage	AC 200V/minute
Insulation Resistance	500M Ohm MIN. /DC 100V
Temperature	-40 to +90°C

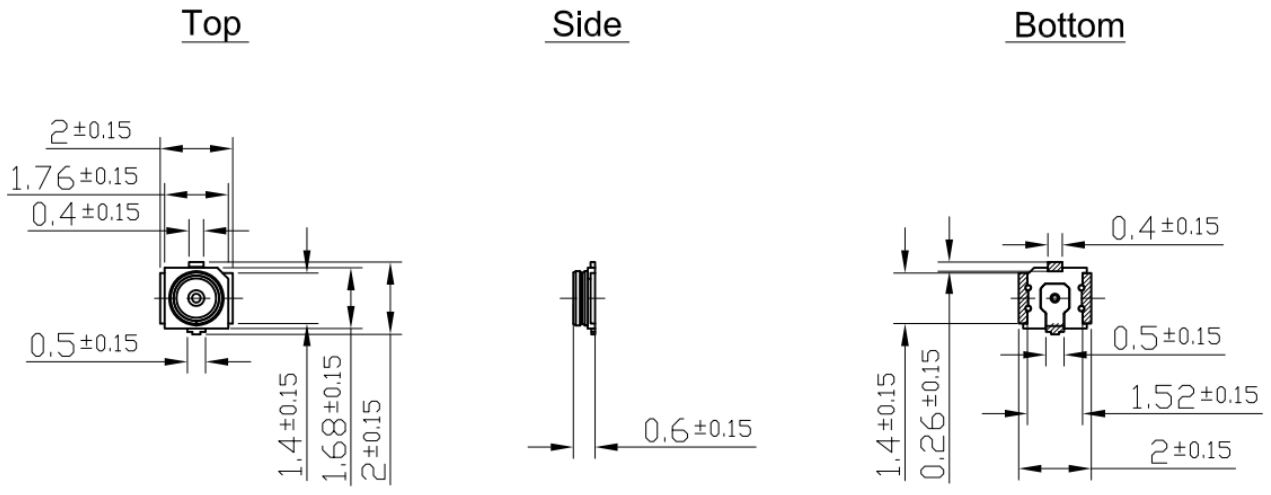
Material	
Ground Contact	Copper Alloy (Au plating)
Centre Contact	Copper Alloy (Au plating)
Insulator	LCP UL94V-0

Environmental	
Temperature	-40 to +90°C
RoHs Complaint	Yes
Halogen-Free	Yes
Vibration (Mating connector)	Frequency: 10Hz-100Hz Duration: 20mins Peak value of acceleration: 59m/s <sup>2</sup> (6G) Direction, cycle: 3 axis, 3 cycles
Shock (Mating connector)	Peak Value of acceleration: 735m/s <sup>2</sup> (75G) Duration: 11ms Waveform: Half sinusoidal Direction: 6 axis Cycles: 3 cycles for each direction
Humidity	Temperature: 40+/- 2°C Humidity: 90~95%RH Duration 96 hours
Thermal Shock	-55°C for 30mins to 85°C for 30mins Transition Time: 5 minutes Cycles: 5
High temperature life	90+/- 2°C for 96 hours
H <sub>2</sub> S gas	Temperature: 40+/-2°C Relative Humidity: 80+/-5%RH Gas H <sub>2</sub> S 3+/-1ppm

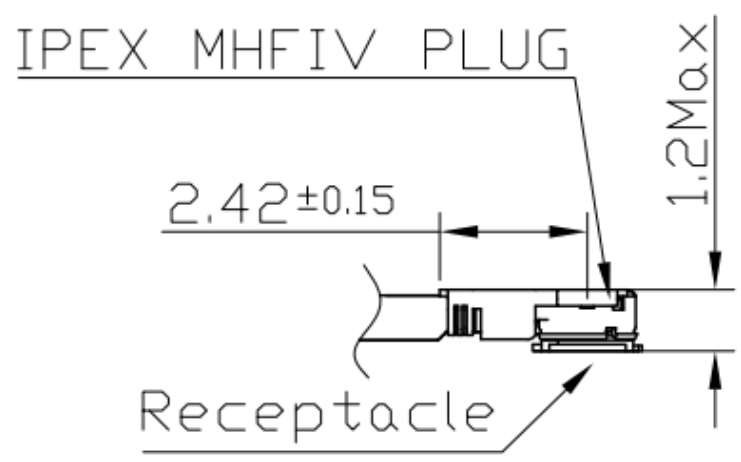


	Duration 96 hours
Salt Water Spray	Temperature: 35+/-2°C Relative Humidity: 95~98%RH Salt Water Density: 5+/-1% (by weight) Duration: 48 Hours

### 3. Technical Drawing

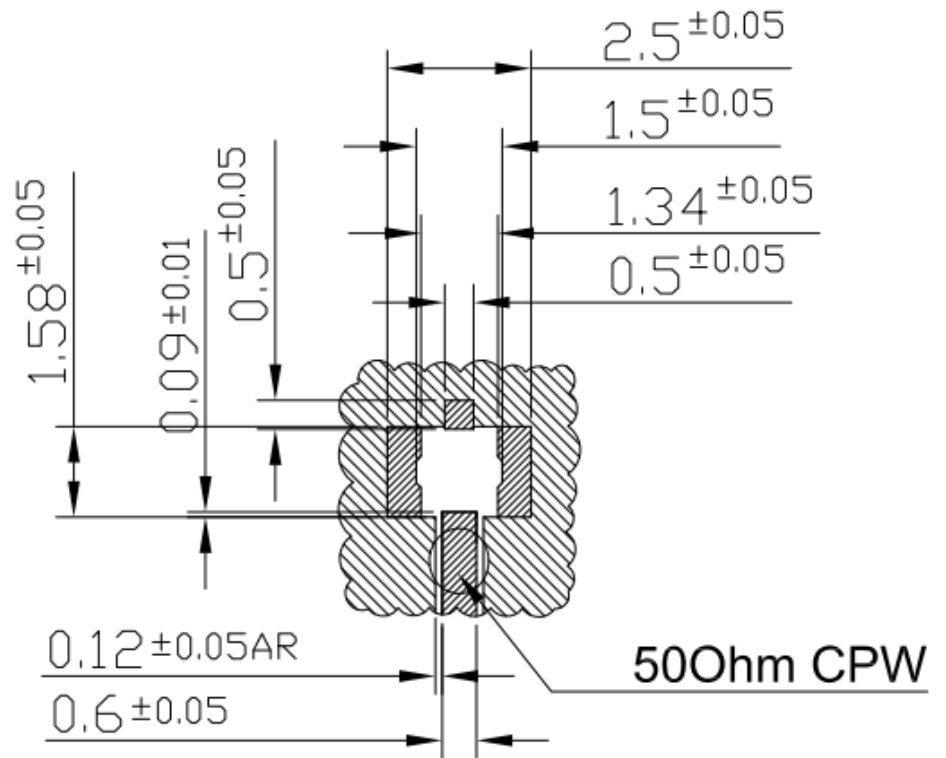


### Mated View






## 4. Footprint

### PCB Footprint



Note:

- 1. Soldered Area 
- 2. Solder Mask 
- 3. Clearance Area 
- 4. PCB Thickness 0.4mm

## 5. Reflow Profile

The following is the recommended reflow profile for the IPEX MHF4 receptacle. The recommended number of reflow cycles are 2.

