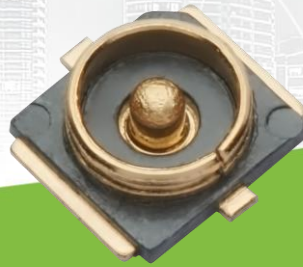




# TAOGLAS®



# Datasheet

## TXR 4 Series SMD HSC Compatible Receptacle

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

### **Description:**

TXR 4 Series HSC Compatible Receptacle  
Compatible with I-PEX MHF®4, I-PEX MHF®4L, and Murata HSC

### **Features:**

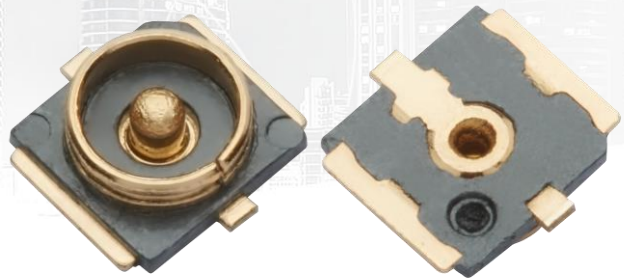
Mating Height: 1.2mm Max  
10000pcs per reel  
Dimensions: 2 x 2 x 0.6 mm  
Diameter: 1.4mm  
RoHS & Reach Compliant

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## 1. Introduction



Part of the Taoglas TXR Series of receptacles, the TXR 4 RECE.20449.001E.01 is a 3-pad type wire-to-board SMT Receptacle solution that is ultra-small, lightweight and low profile, 1.6mm max. with an operational frequency range of DC to 6 GHz the TXR 4 RECE.20449.001E.01 is gold plated to provide superior performance and allow easy mounting of the male RF connector.

Packaged on tape and reel, this receptacle is designed to be placed with automatic “pick and place” equipment for ease of installation.

The TXR 4 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 I-PEX MHF<sup>®</sup>4, I-PEX MHF<sup>®</sup>4L, Murata HSC and all other available HSC compatible connectors.

#### Applicable Technologies:

TXR 4 RECE.20449.001E.01 receptacles are commonly integrated into GSM module, GPS module, Wireless LAN modules. Many 5G modules are currently using these compatible receptacles for the next generation of cellular applications.

For further information, please contact your regional Taoglas customer support team.

## 2. Specifications

Electrical	
Operation Frequency	DC to 6 GHz
VSWR	1.3 Max at DC~3 GHz
	1.4 Max at 3~6 GHz
Nominal Impedance	50 Ohm
Rated Voltage	60V AC
Rated Current	1A Max.
Contact Resistance	Subject mated contacts assembled in housing to 20mV Max. open circuit at 10mA Max
Withstand Voltage	AC 200V/minute
Insulation Resistance	Impressed voltage 100V DC for 1min Initial : 500MΩ Min. Final : 100MΩ Min.
Dielectric Withstanding Voltage	200V AC for 1 minute
Current leakage	0.5mA Max
Temperature	-40 to +90°C

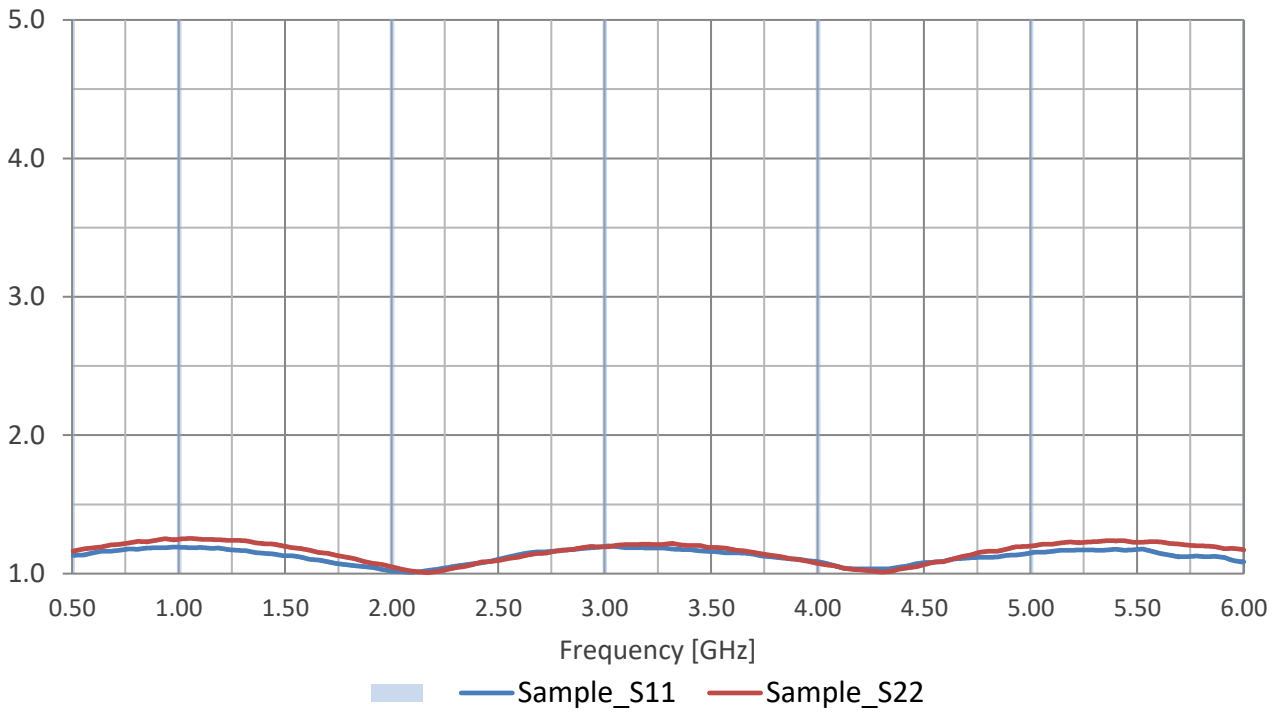
Material	
Outer Contact	Copper Alloy (Au plating)
Centre Contact	Copper Alloy (Au plating)
Insulator	LCP UL94-V0

Environmental	
Durability per EIA-364-09C	2-3 cycles per min @ 30 cycles
Vibration	10Hz -> 100Hz -> 10Hz for 20 mins.
Peak value of acceleration	1.5mm or 59m/s <sup>2</sup> (6G)
Direction	3 axis 3 Cycles
Mechanical Shock	
Accelerate Velocity	735m/s <sup>2</sup> (75G)
Waveform	Half-sine shock plus.
Duration	11m sec.
Direct Current	1mA
Direction	In ±X, ±Y and ±Z axes.
Cycle	3 cycles for each direction, totally 18 cycles

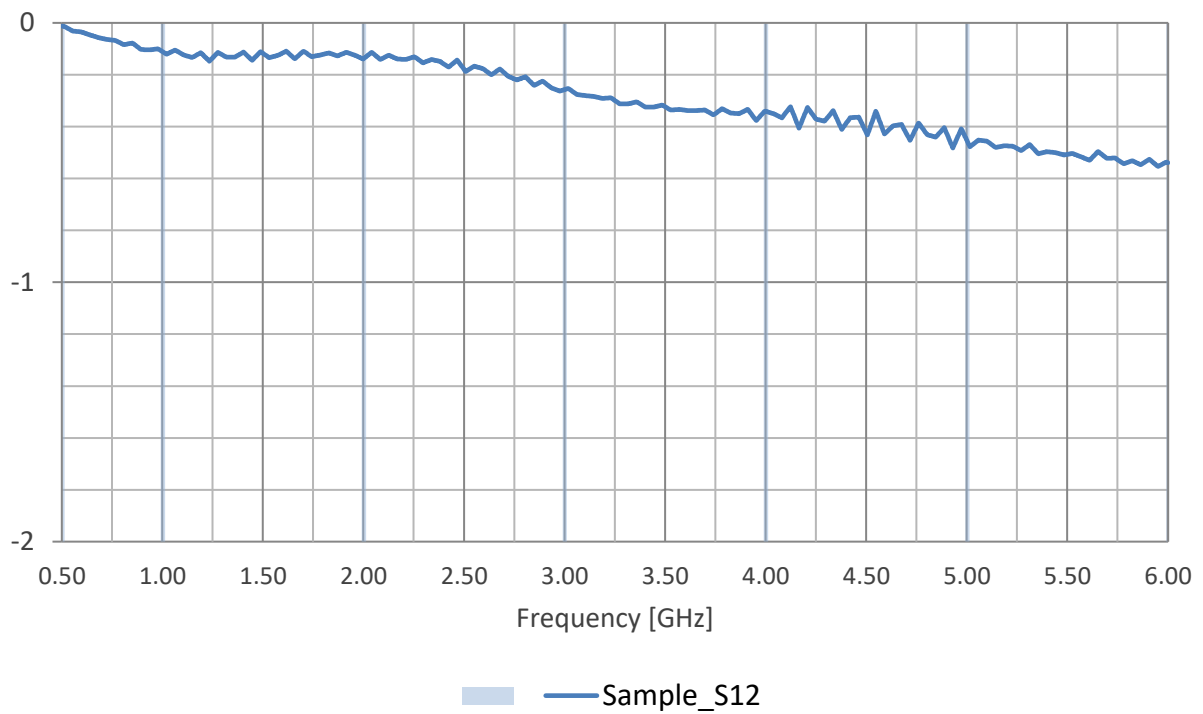
Thermal Shock	40°C for 30mins to 5~35°C for 5 minutes to 90°C for 30mins to 5~35°C for 5 minutes
Transition Time	5 minutes
Cycles	5
Humidity	90~95% RH
Temperature	40+/- 2°C
Duration	96 hours
Salt Water Spray	
Temperature	35+/- 2°C
Salt Water Density	5+/-1% (by weight)
Duration	48 Hours
High temperature life	90+/- 2°C for 96 hours
Cold temperature life	-40+/- 2°C for 96 hours
H2S gas	
Temperature	40+/-2°C
Relative Humidity	80 +/-5% RH
Gas H2S	3+/-1 ppm
Duration	96 Hours

### 3. Connector Data

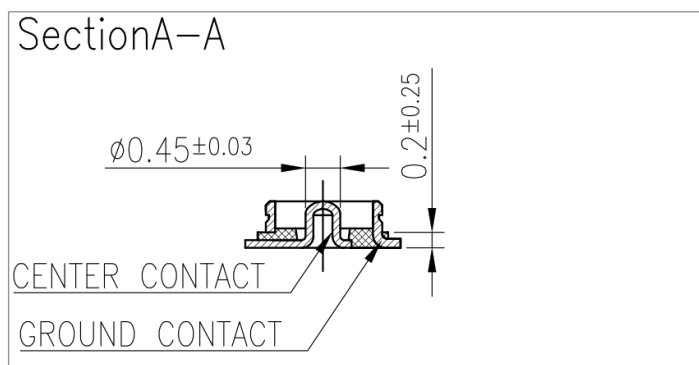
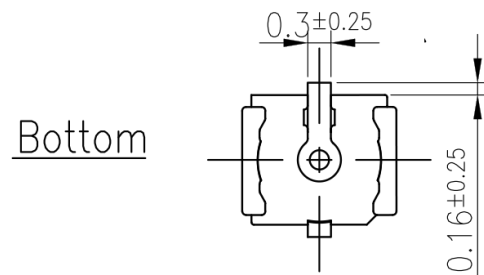
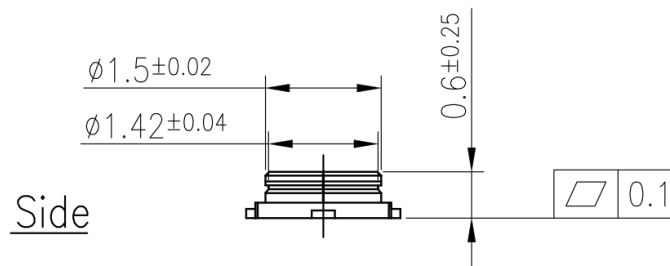
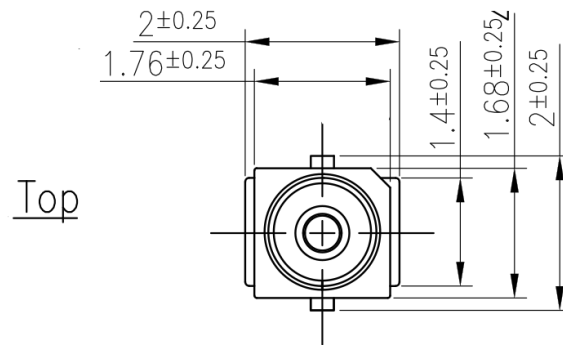
#### 3.1 VSWR



#### 3.2 Insertion Loss

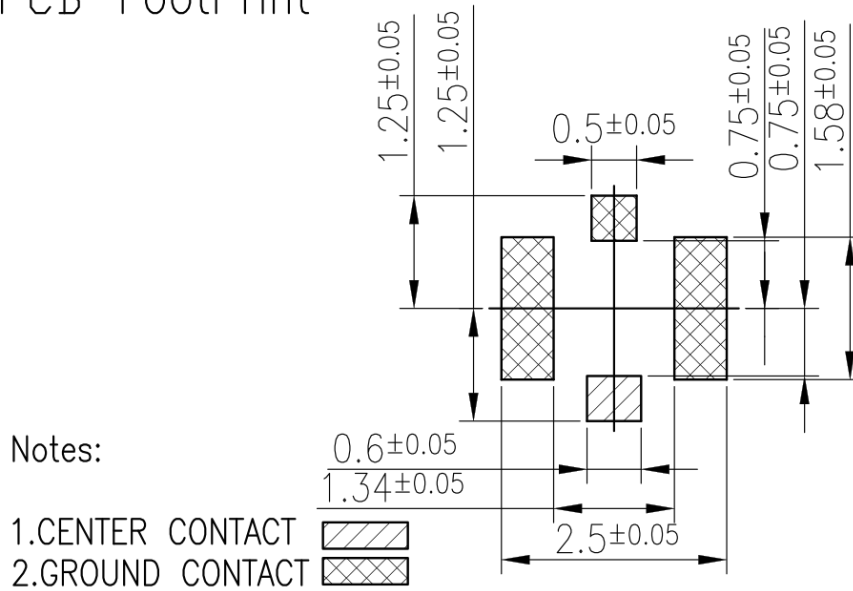


## 4. Mechanical Drawing (Units: mm)



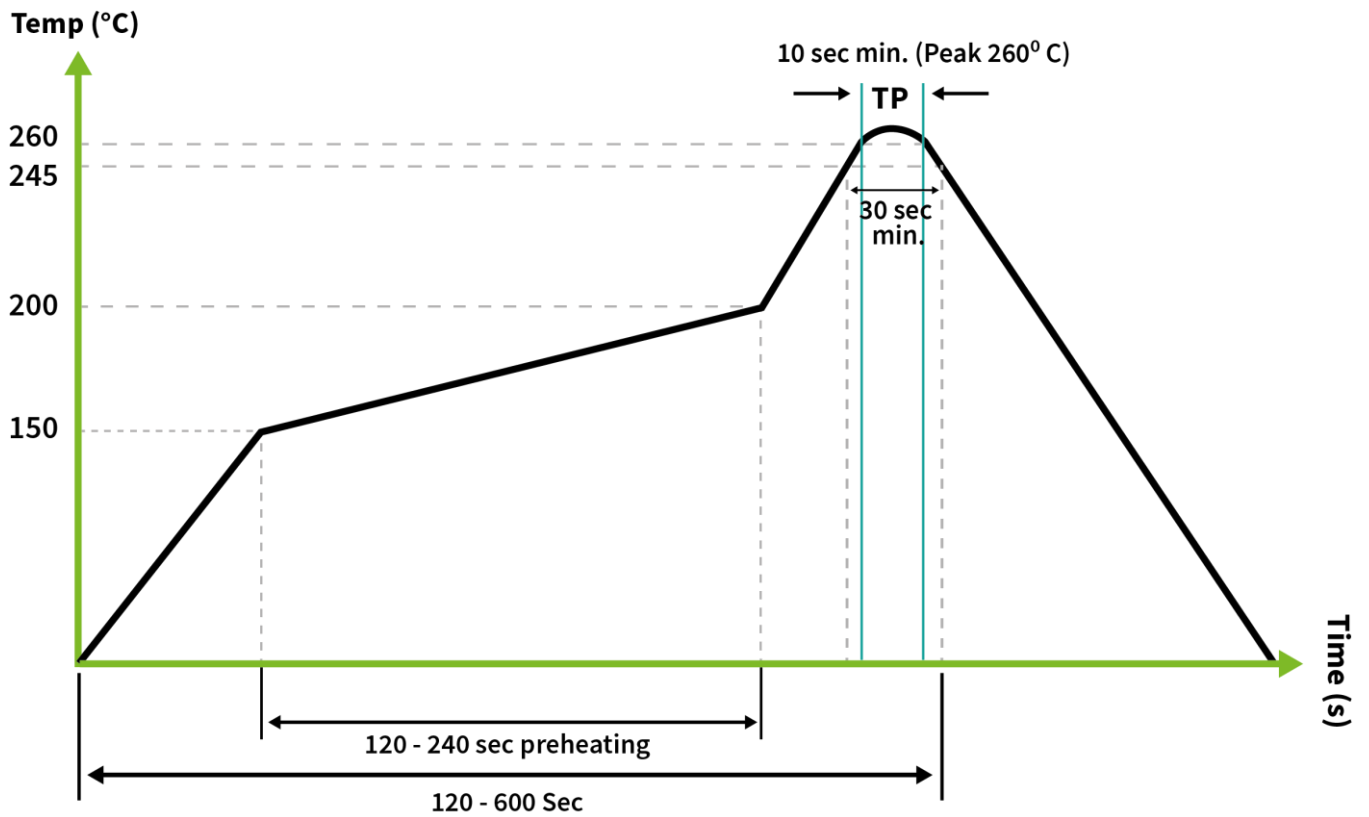
## 5. Footprint

### PCB FootPrint



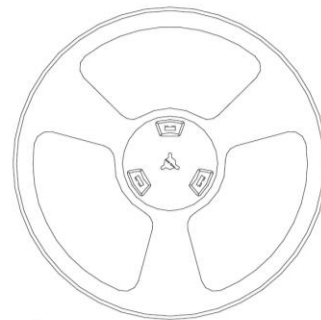


## 6. Solder Reflow

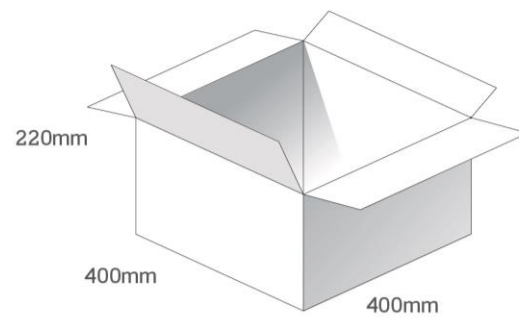




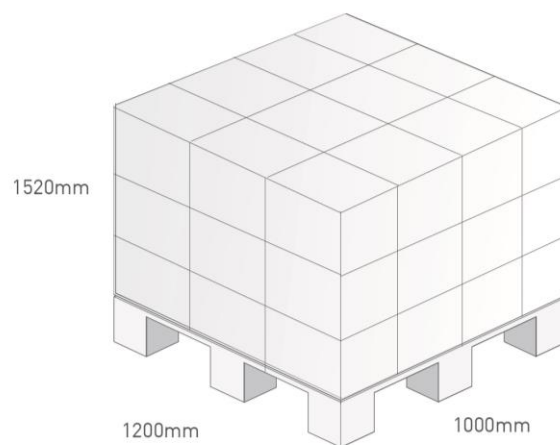
10000 pcs RECE.20449.001E.01 reel  
 Dimensions - 330\*330\*20mm  
 Weight - 403g



10 reels, 100000 pcs in one carton  
 Carton Dimensions - 400\*400\*220mm  
 Weight - 4.9Kg



Pallet Dimensions 1200\*1000\*1520mm  
 36 Cartons per Pallet  
 12 Cartons per layer  
 3 Layers



Changelog for the datasheet

**SPE-16-8-034 - RECE.20369.001E.01**

**Revision: B (Current Version)**

Date:	2021-02-03
Changes:	Following EC-20-8-036
Changes Made by:	Jack Conroy

**Previous Revisions**

**Revision: A (Original First Release)**

Date:	2016-04-21
Notes:	
Author:	Jack Conroy



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