

#### TXR<sup>™</sup> 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 0.6mm Diameter: 1.4mm RoHS & Reach Compliant



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#### 1. Introduction



Part of the Taoglas TXR<sup>™</sup> Series of receptacles, the TXR<sup>™</sup> 4 RECE.20449.001E.01 is a 3-pad type wire-toboard 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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.



## Specifications

2.

Electrical		
Operation Frequency	DC to 6 GHz	
VSWR	1.3 Max at DC~3 GHz	
VSWK	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 : 500M $\Omega$ Min. Final : 100M $\Omega$ 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	

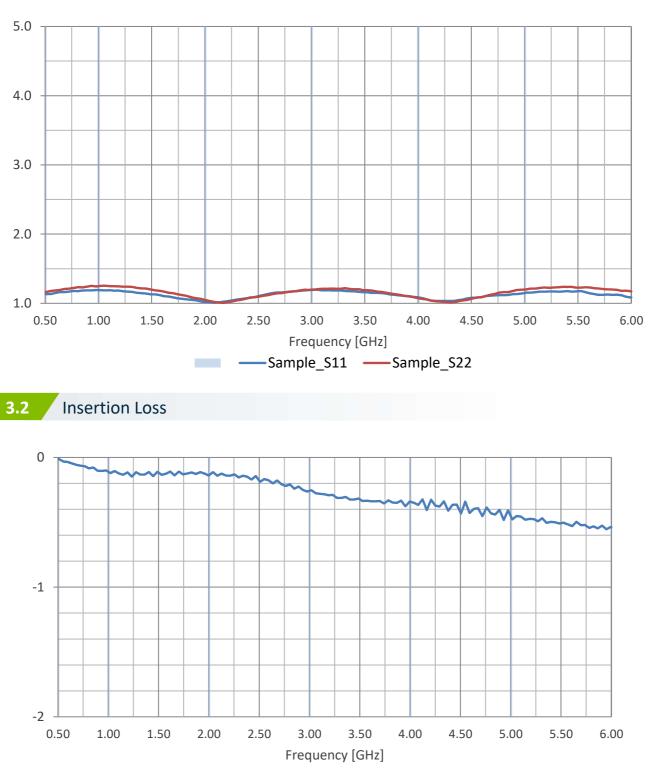


	Environmental			
Durability per EIA-364-09C (2-3 cycles per min @ 30 cycles)				
Vibration	10Hz -> 100Hz -> 10Hz for 20 mins.			
Peak value of acceleration	1.5mm or 59m/s2 (6G)			
Direction	3 axis 3 Cycles			
	Mechanical Shock			
Accelerate Velocity	735m/s2 (75G)			
Waveform	Half-sine shock plus.			
Duration	11m sec.			
Direct Current	1mA			
Direction	In $\pm X$ , $\pm Y$ and $\pm Z$ axes.			
Cycle	3 cycles for each direction, totally 18 cycles			
Thermal Shock (40°C for 30min	ns 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			
Moister Sensitivity Level	3			



### 3. Connector Data



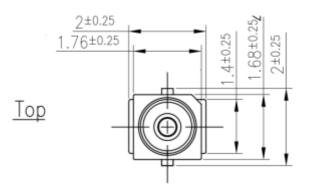


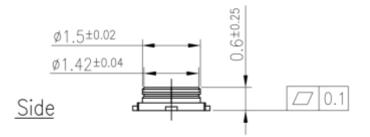
Sample\_S12

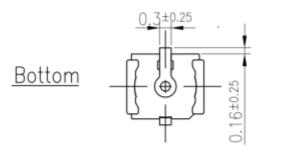


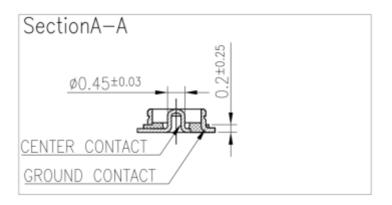
### Mechanical Drawing (Units: mm)

4.



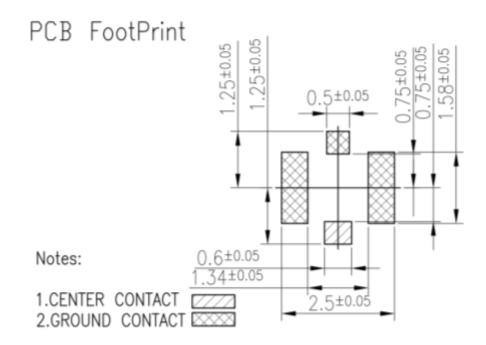








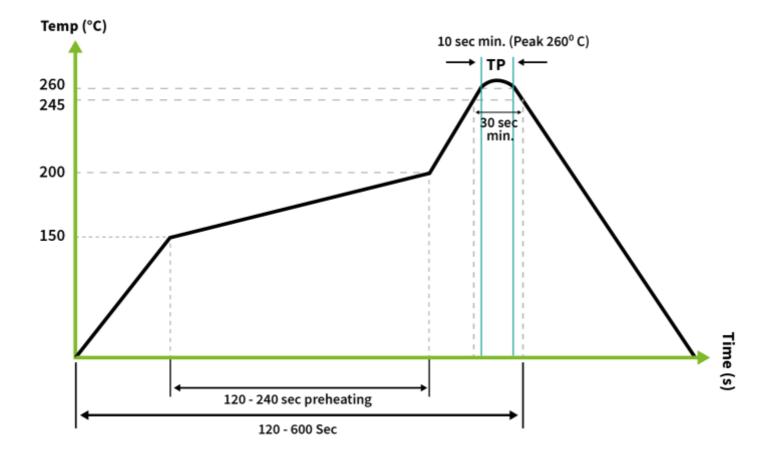
### Footprint





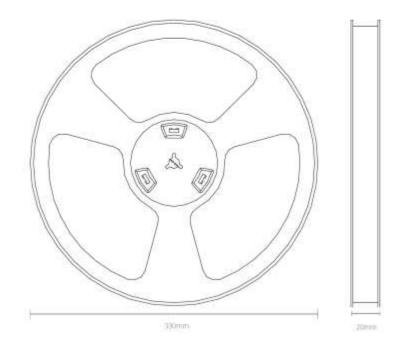
### Solder Reflow

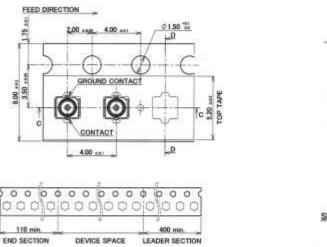
6.





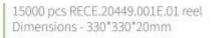
15000 pcs RECE.20449.001E.01 reel Dimensions - 330\*330\*20mm

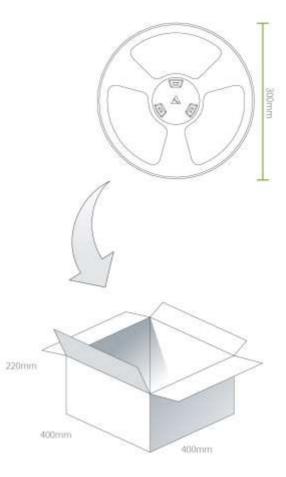












10 reels, 150000 pcs in one carton Carton Dimensions - 400\*400\*220mm



Changelog for the datasheet		
SPE-16-8-034 - RECE.20369.001E.01		
Revision: D (Current	Version)	
Date:	2022-03-08	
Changes:	Updated Packa	ging
Changes Made by:	Gary West	

#### **Previous Revisions**

Revision: C	
Date: 2021-07-15	
Changes: Updated Solder Reflow Diagram & Adding MSL.	
Changes Made by: Gary West	

Revision: B		
	Date:	2021-02-03
Ch	anges:	Following EC-20-8-036
Changes Ma	ide by:	Jack Conroy

Revision: A (Original First Release)		
Date:	2016-04-21	
Notes:		
Author:	Jack Conroy	





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