



### **SMD Mount Receptacle**

Part No:

RECE.20369.001E.01

### **Description:**

SMD W.FL Compatible Receptacle

Compatible with I-PEX MHFIII, Hirose W.FL, Hirose W.FL2

#### **Features:**

Mating Height: 1.6mm Max

5000pcs per reel

Dimensions: 2 x 2 x 0.85 mm

Diameter: 1.4mm

RoHS & Reach Compliant



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### 1. Introduction



Part of the Taoglas SMD Mount Receptacle the RECE.20369.001E.01 is a 3-pad type wire-to-board SMD Receptacle solution that is ultra-small, lightweight and low profile (1.6mm MAX.) with an operational frequency range of DC to 6 GHz. Taoglas the RECE.20369.001E.01 is gold plated to have 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 RECE.20369.001E.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 MHFIII, Hirose W.FL and all other available W.FL compatible connectors .

### Applicable Technologies:

The RECE.20369.001E.01 receptacles are commonly integrated into GSM module, GPS module, Wireless LAN modules.

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



# 2. Specifications

Electrical		
Operation Frequency	DC to 6 GHz	
VCMD	1.3 Max at DC~3 GHz	
VSWR	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 5 Cycles	
	Mechanical Shock	
Accelerate Velocity	735m/s2 (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	

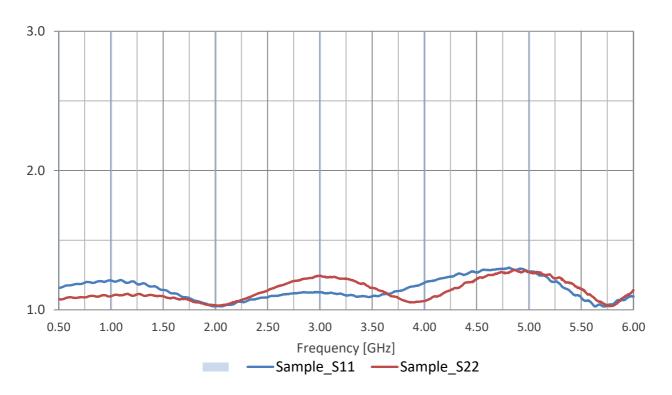


Thermal Shock (40°C for 30min	s to 5~35°C for 5 minutes to 90°C for 30mins to 5~35°C for 5 minutes)
Transition Time	5 minutes
Cycles	5
Humidity	90∼95% RH
Temperature	40+/- 2°C
Duration	96 hours
	Salt Water Spray
Temperature	35+/- 2°C
Salt Water Density	5+/-1% (by weight)
Duration	48 Hours
High temperature 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
Moisture Sensitivity Level	3

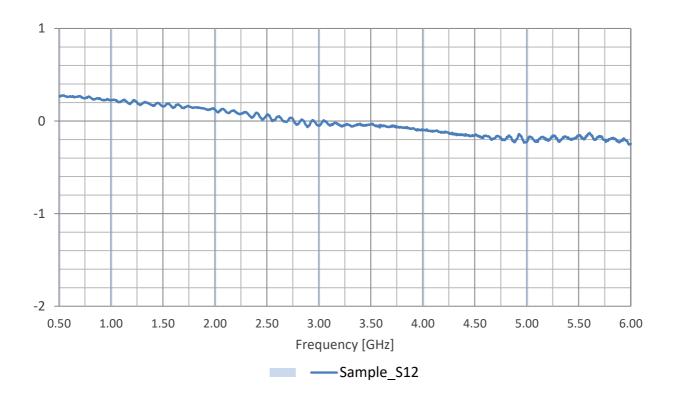


## 3. Connector Data

### 3.1 VSWR

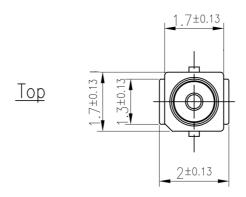


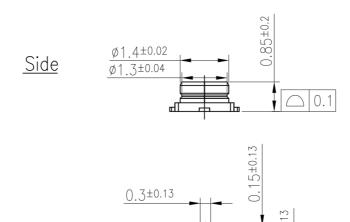
### 3.2 Insertion Loss



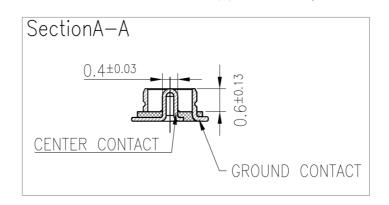


# 4. Mechanical Drawing (Units: mm)





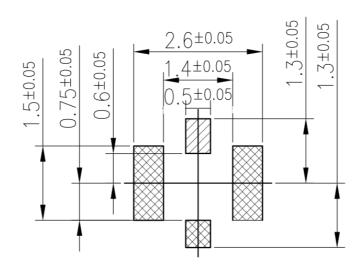
<u>Bottom</u>



0.3±0.13



# 5. Footprint

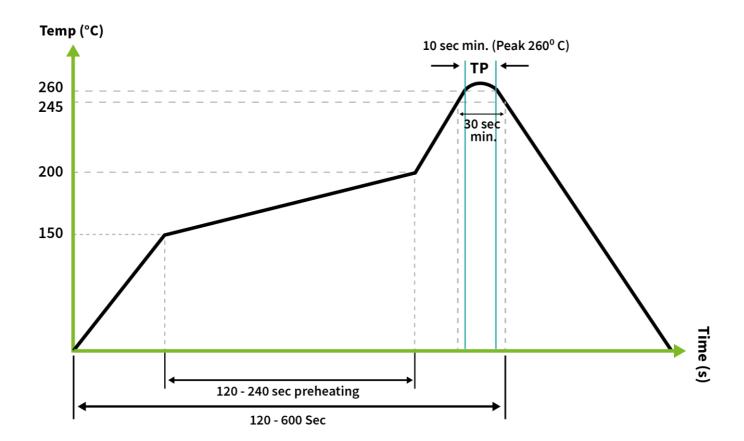


Notes:

1.CENTER CONTACT 2.GROUND CONTACT



# 6. Solder Reflow

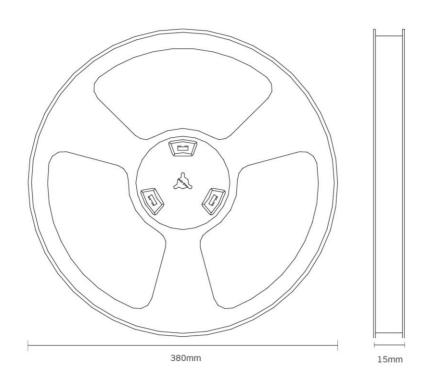


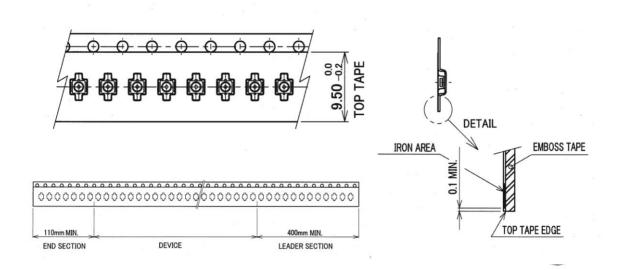


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# 7. Packaging

5000 pcs RECE.20369.001E.01 reel Dimensions - 380\*380\*15mm Weight -262g



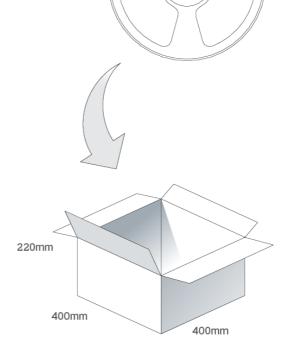




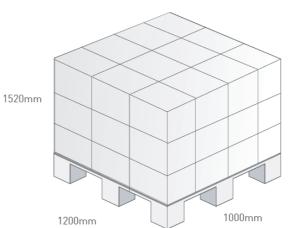
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5000 pcs RECE.20369.001E.01 reel Dimensions - 380\*380\*15mm Weight - 262g





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





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#### Changelog for the datasheet

### SPE-16-8-033 - RECE.20369.001E.01

Revision: E (Current Version)	
Date:	2023-03-03
Changes:	Updated description
Changes Made by:	Cesar Sousa

#### **Previous Revisions**

Revision: D	
Date:	2022-01-27
Changes:	Updated Solder Reflow Diagram & Adding MSL.
Changes Made by:	Gary West

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

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

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



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