



# TAOGLAS®



# Datasheet

## TXR™ 1 Series SMD U.FL Compatible Receptacle

**Part No:**  
RECE.20279.001E.01

### **Description:**

TXR™ Series SMD TXR™ 1 U.FL Receptacle  
Compatible with I-PEX MHFI, I-PEX MHFII, I-PEX MHFHT, Hirose U.FL, UMC

### **Features:**

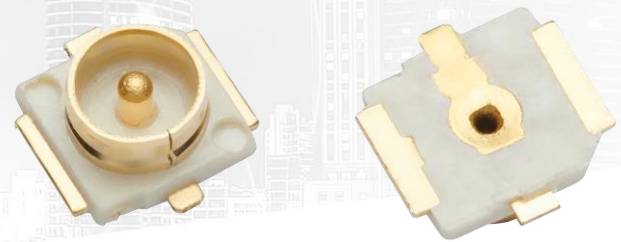
Mating Height: 3mm Max  
Supplied on Tape & Reel 5000pcs per reel  
Dimensions: 3 x 3 x 1.25 mm  
Diameter: 2mm  
RoHS & Reach Compliant

|                          |    |
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## 1. Introduction



Part of the Taoglas TXR™ Series of receptacles, the TXR™ 1 RECE.20279.001E.01 is a 3-pad type wire-to-board SMD receptacle that is ultra-small, lightweight and low profile, 2.5mm max. With an operational frequency range of DC to 6 GHz the TXR™ 1 RECE.20279.001E.01 is gold plated to provide superior performance and allow for ease of mounting with 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 assembly.

The TXR™ 1 RECE.20279.001E.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 MHFI, I-PEX MHFII, I-PEX MHFHT, Hirose U.FL and all other available U.FL compatible connectors .

Applicable Technologies:

TXR™ 1 RECE.20279.001E.01 receptacles are commonly integrated into cellular, GPS and wireless LAN modules.

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<br>20mV Max. open circuit at 10mA Max |
| Withstand Voltage               | AC 200V/minute   |
| Insulation Resistance           | Impressed voltage 100V DC for 1min<br>Initial : 500MΩ Min. Final : 100MΩ Min.        |
| Dielectric Withstanding Voltage | 200V AC for 1 minute   |
| Current leakage                 | 0.5mA Max  |
| Temperature                     | -40 to +90°C   |

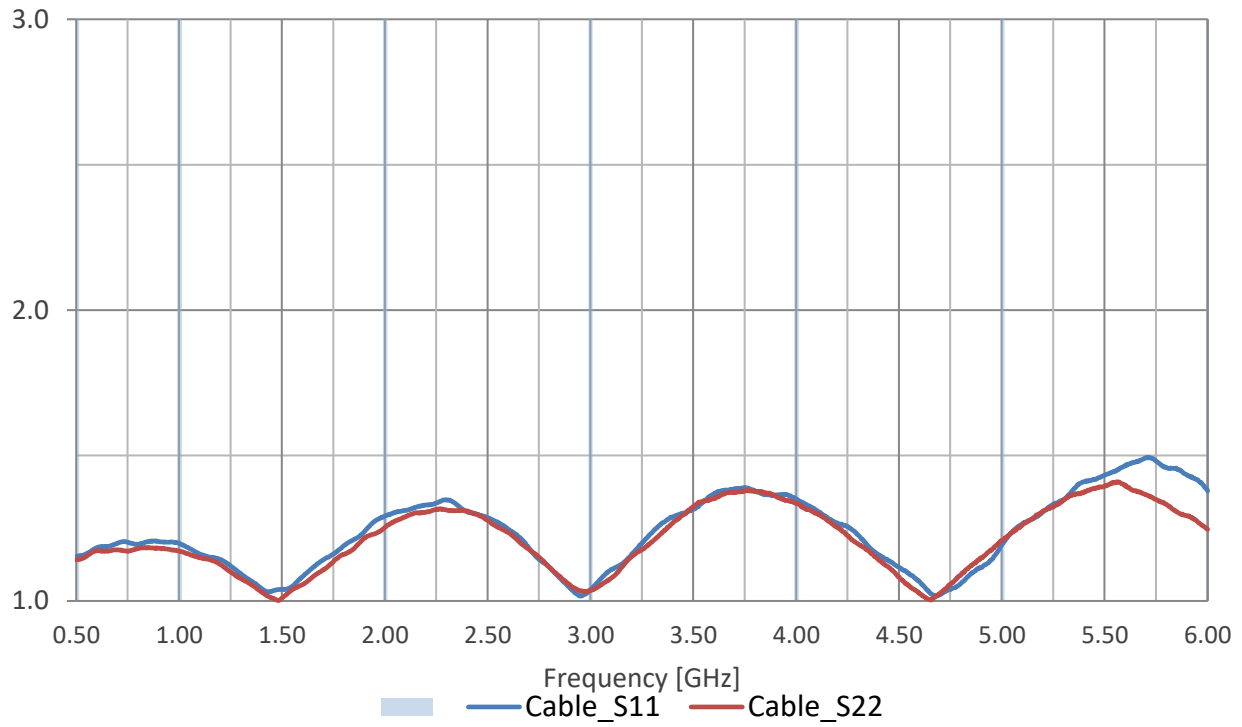
| Material       |                           |
|----------------|---------------------------|
| Outer Contact  | Copper Alloy (Au plating) |
| Centre Contact | Copper Alloy (Au plating) |
| Insulator      | LCP UL94V-0               |

| 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 - 5 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 |

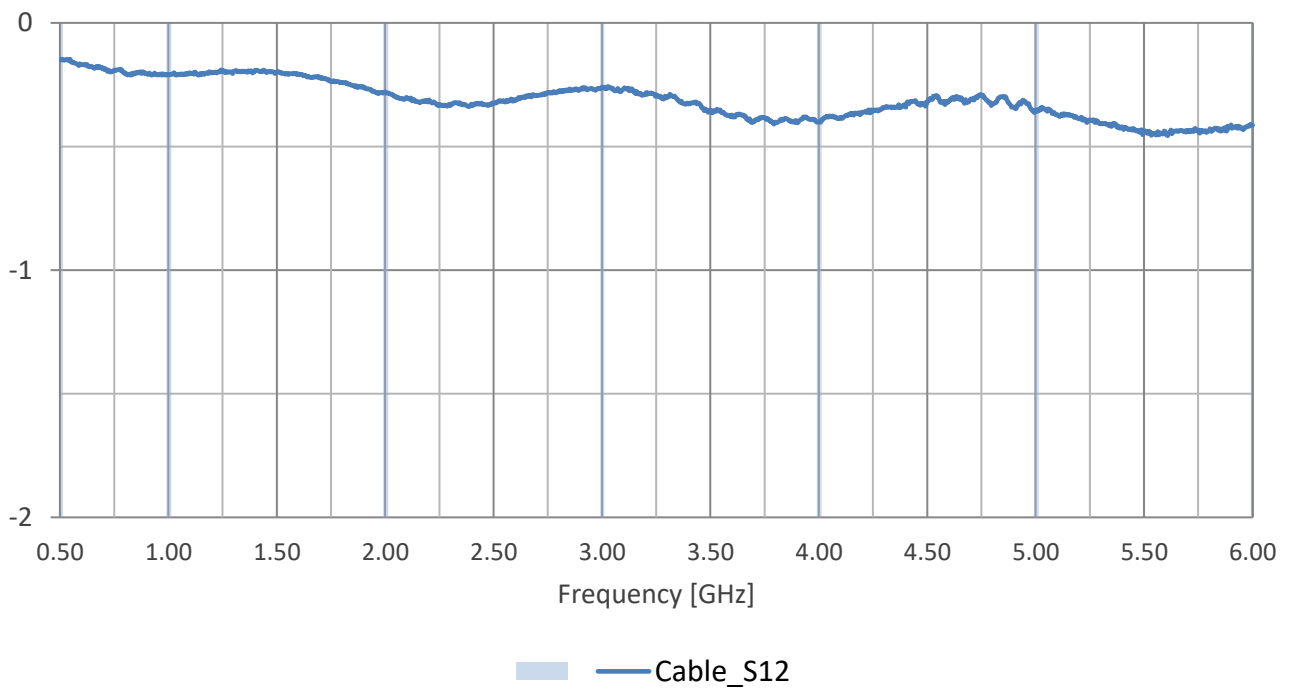
| Thermal Shock (40°C for 30mins to 5~35°C for 5 minutes to 90°C for 30mins to 5~35°C for 5 minutes) |                         |
|--|-------------------------|
| Transition Time  | 5 minutes               |
| Cycles   | 5                       |
| Humidity   | 90~95% RH               |
| Temperature  | 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                |
| Moister Sensitivity Level  | 3                       |

### 3. Connector Data

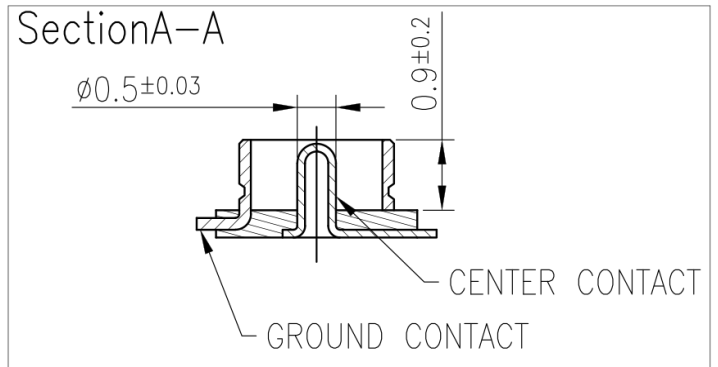
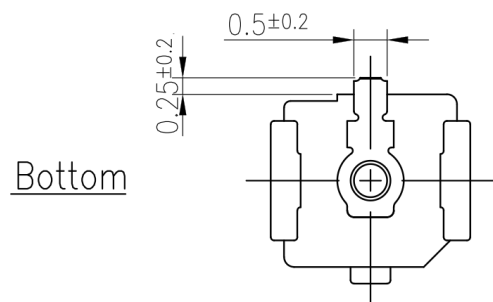
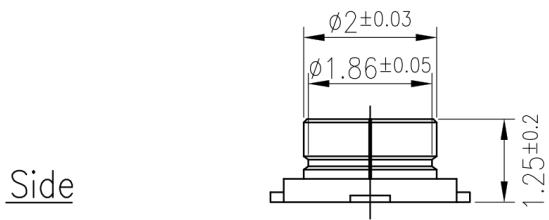
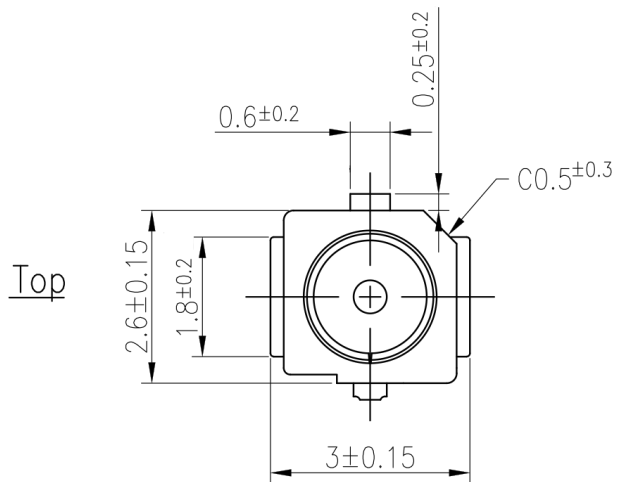
#### 3.1 VSWR



#### 3.2 Insertion Loss

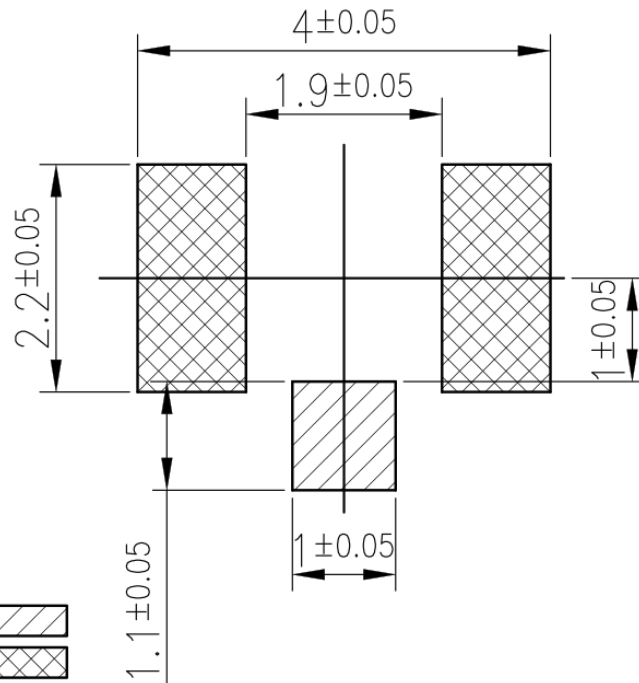


## 4. Mechanical Drawing (Units: mm)



## 5. Footprint

### PCB FootPrint

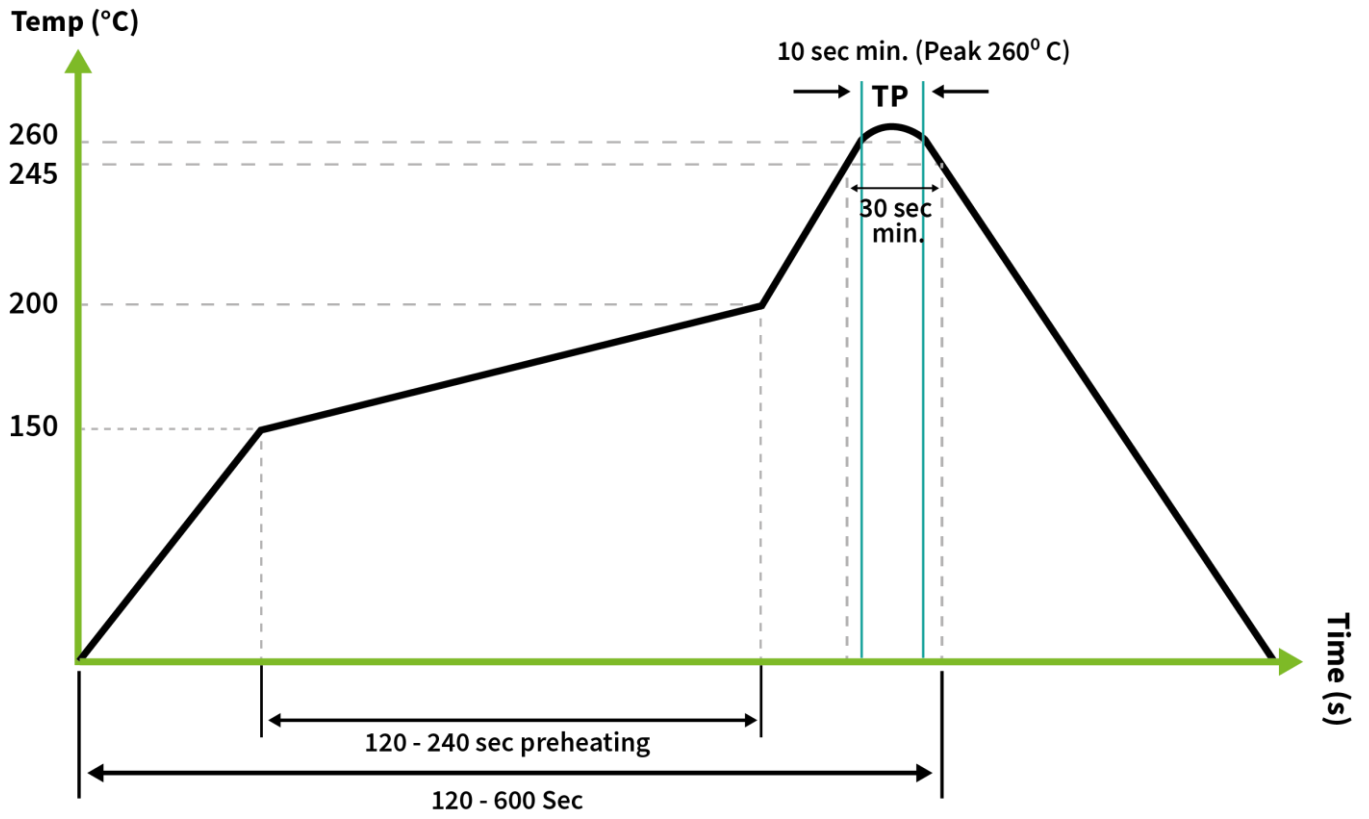


Notes:

1. CENTER CONTACT 
2. GROUND CONTACT 

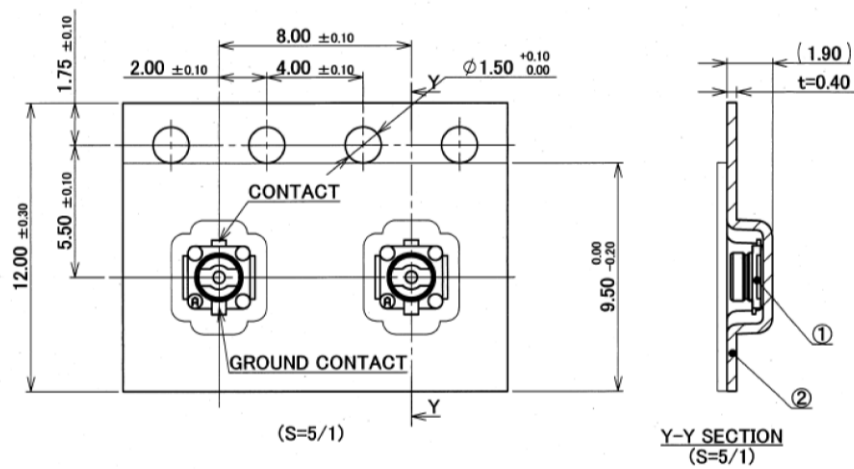
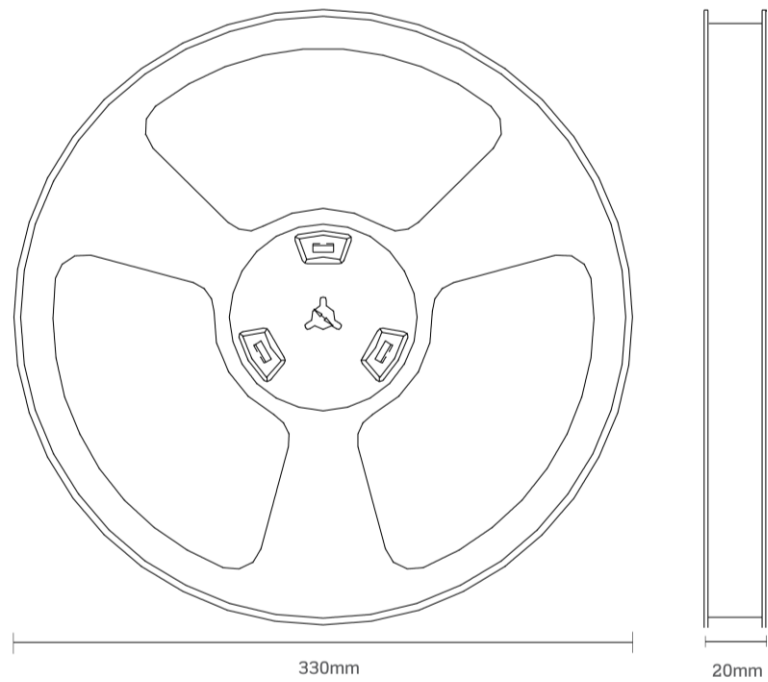


## 6. Solder Reflow



## 7. Packaging

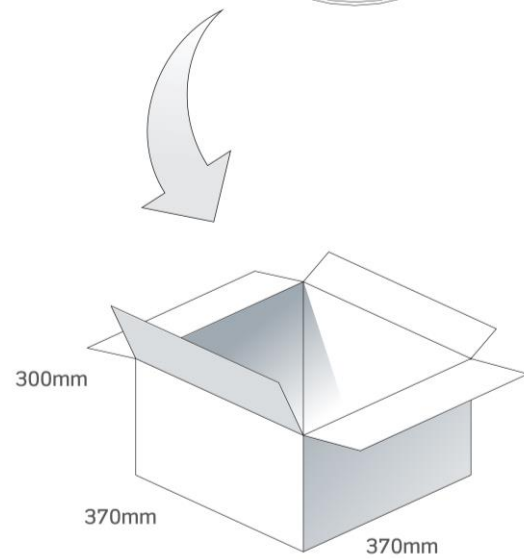
5000 pcs RECE.20279.001E.01 reel  
 Dimensions - 330\*330\*20mm  
 Weight -300g



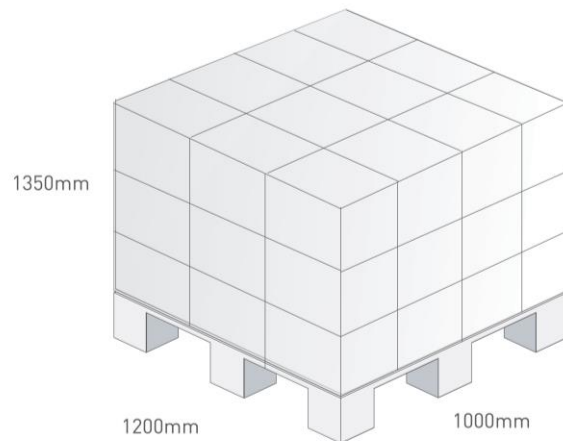
5000 pcs RECE.20279.001E.01 reel  
Dimensions - 330\*330\*20mm  
Weight - 300g



8 reels, 40000 pcs  
in one carton  
Carton Dimensions - 400\*400\*220mm  
Weight - 3.2Kg



Pallet Dimensions 1200\*800\*1320mm  
36 Cartons per Pallet  
6 Cartons per layer  
4 Layers



Changelog for the datasheet

**SPE-16-8-032 - RECE.20279.001E.01**

**Revision: C (Current Version)**

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

**Previous Revisions**

**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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