



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
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## Product Specifications Approval Sheet

Product Description: Multilayer Ceramic Antenna 7370MHz BW 2260MHz  
Size 3.2x1.6mm

TST Parts No.: TQ0196AW0000 (This part is compliant with AEC-Q200)

Customer Parts No.: \_\_\_\_\_

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Nina Chen *Nina Chen*

Approved by: \_\_\_\_\_ Kazuma Lee *Kazuma Lee*

Date: \_\_\_\_\_ 2023/04/14

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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## Multilayer Ceramic Antenna 7370MHz BW 2260MHz Size 3.2x1.6mm

MODEL NO.: TQ0196AW0000

REV. NO.:1.0

### A. Maximum Rating:

1. Operating Temperature Range: -55°C to +125°C
2. Storage Temperature Range: -55°C to +125°C
3. Moisture Sensitivity Level: Level 1 (**MSL 1**)

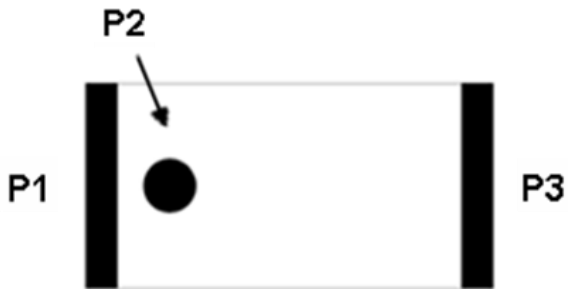
RoHS Compliant  
 Lead free  
 Lead-free soldering

**Electrostatic Sensitive Device (ESD)**

### B. Electrical Characteristics:

Parameter	Specification
Working Frequency	6240 ~ 8500 MHz
VSWR	2 max
Gain	3 – 4.5 dBi
Efficiency	70 – 80 %
Power Capacity	3 W max.
Maximum Input Power	5 Watts for 5 minutes
Polarization	Linear
Azimuth Beamwidth	Omni - Directional

**C. Dimension:**

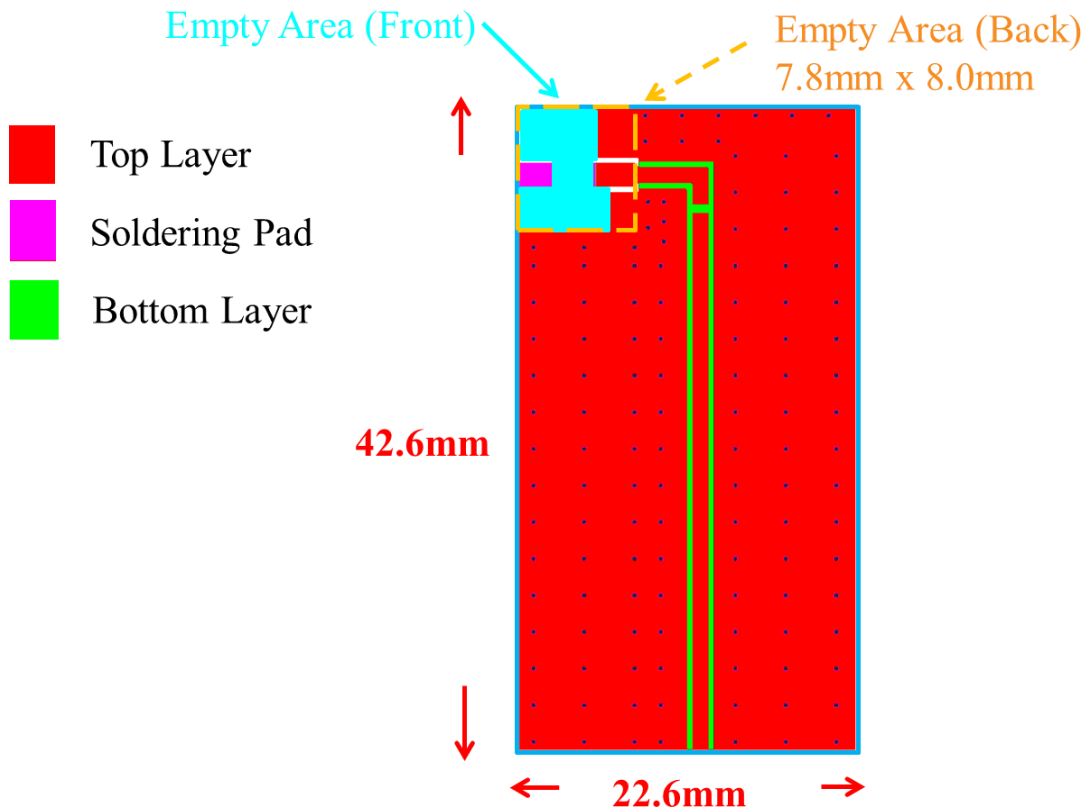


PIN	Connection
1	Feeding
2	Identification Mark
3	Soldering terminal

Figure	Symbol	Dimension (mm)
	L	$3.20 \pm 0.20$
	W	$1.60 \pm 0.10$
	T	$1.10 \pm 0.10$
	A	$0.25 \pm 0.15$

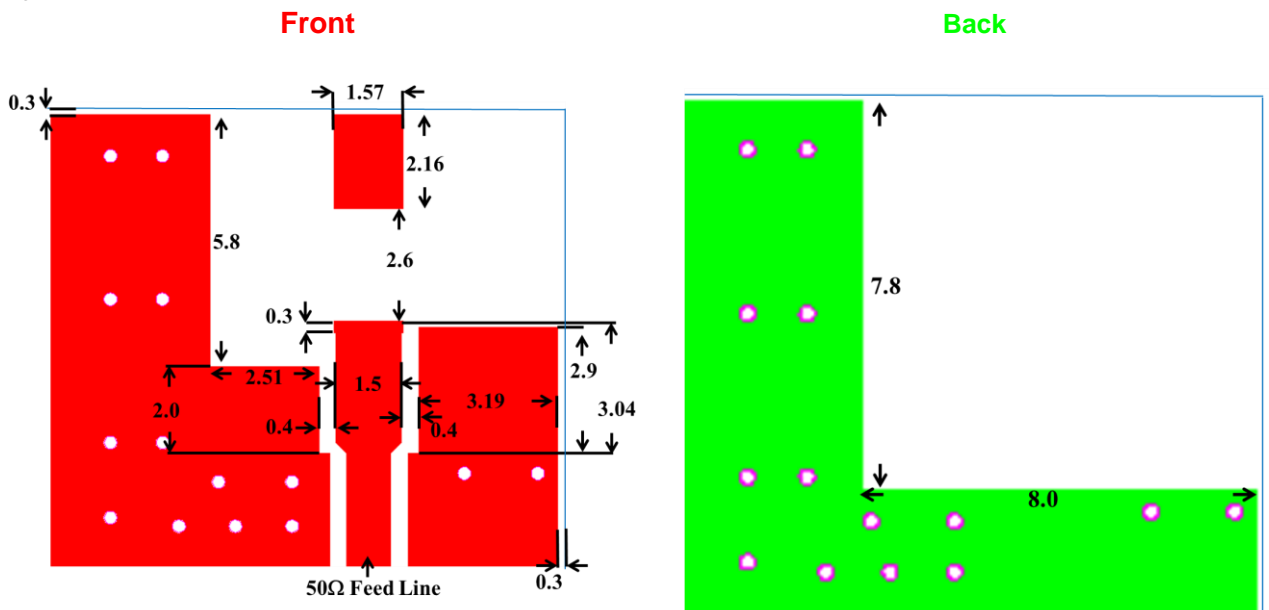
**SOLDER LAND PATTERN DESIGN**

Figure

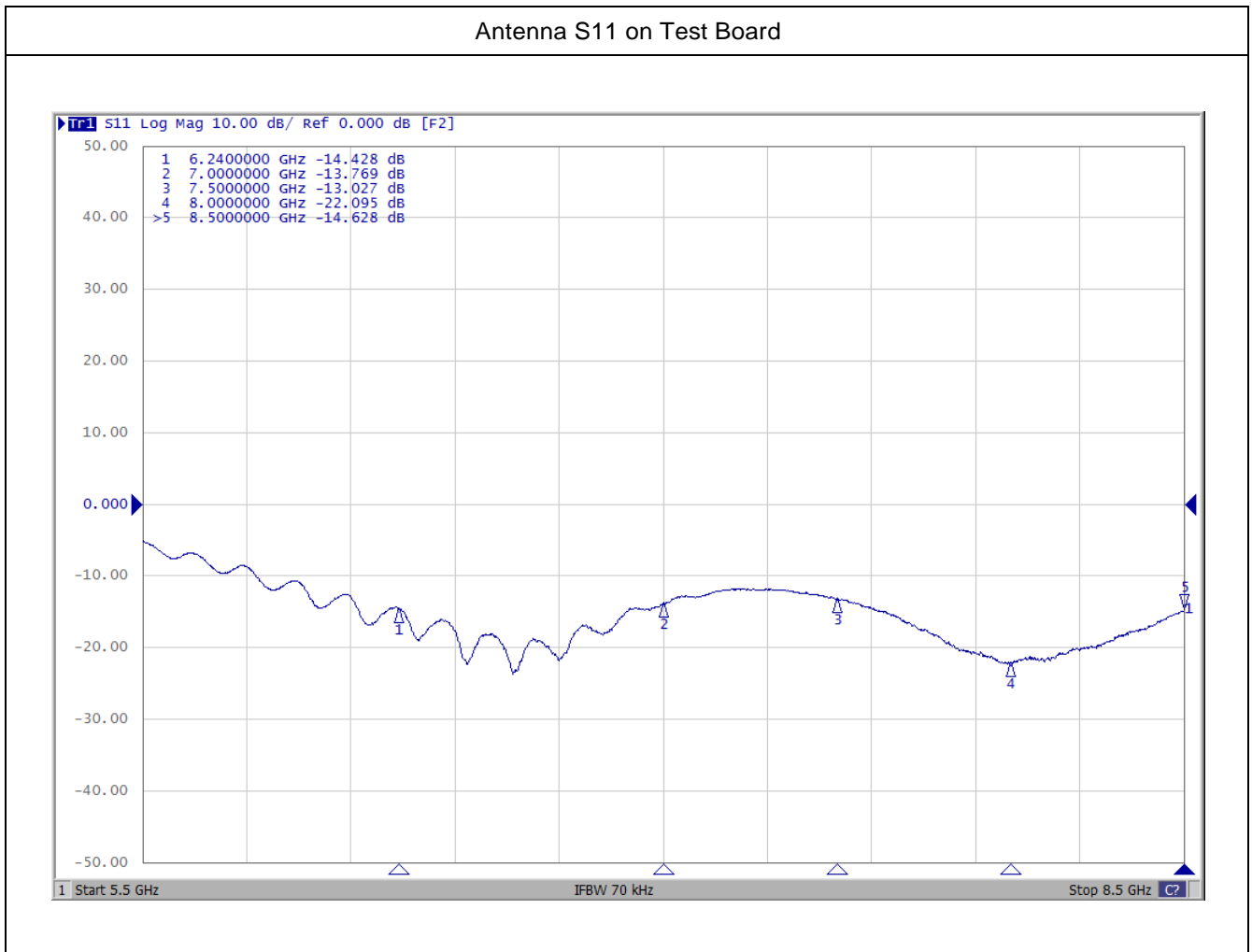


Antenna on Test Board ( Thickness 0.8 mm)

Unit : mm

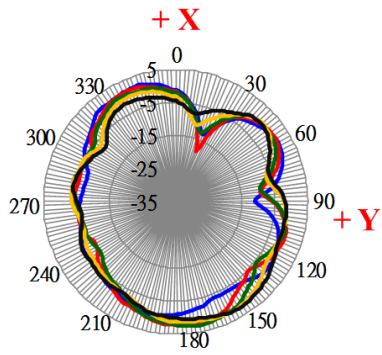
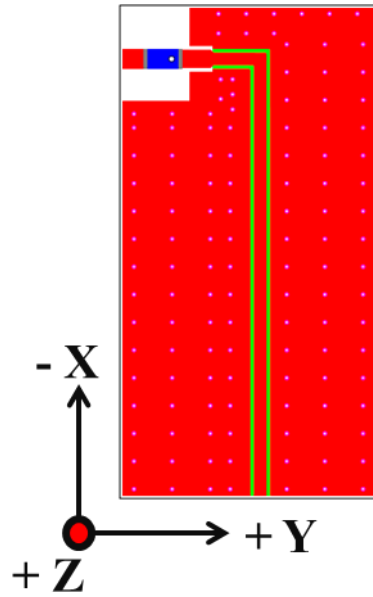


## D.Frequency Characteristics:

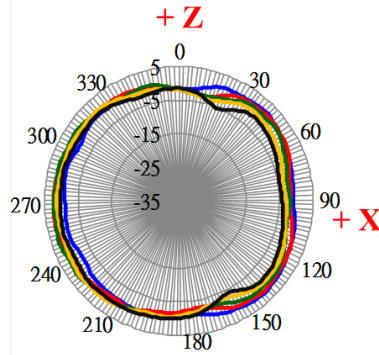


## RADIATION PATTERNS

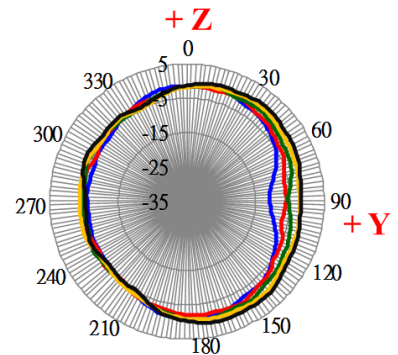
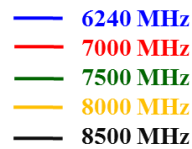
Radiation Pattern and Gain were dependent on measurement board design. The specification of [DCA60S04](#) antenna was measured based on the PCB size and installation position as shown in the below figure Test Board.



**XY Plane**



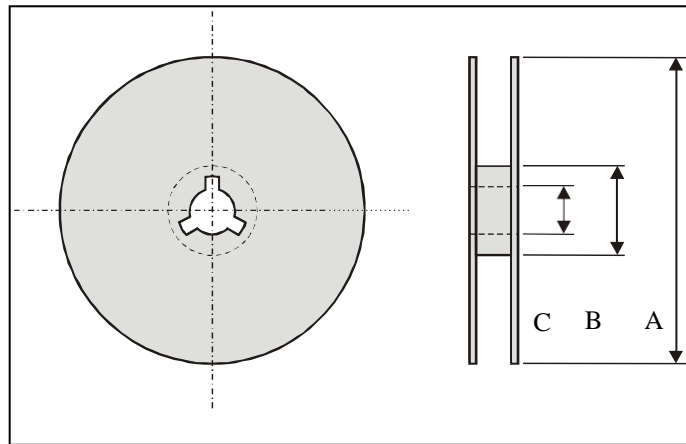
**ZX Plane**



**ZY Plane**

**D. Packing:**

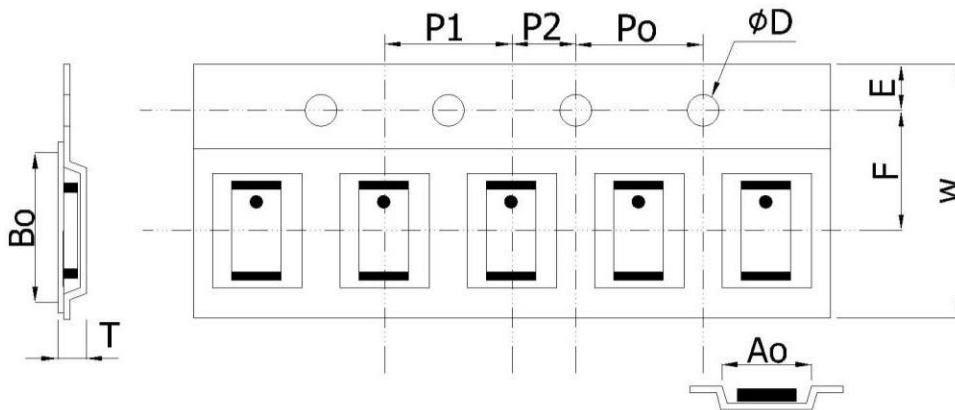
**1.Reel Dimensions:**



Index	A	B	C
Dimension (mm)	$\Phi 178$	$\Phi 60.0$	$\Phi 13.5$

Typing Quantity: 2000 pieces per 7" reel

**2.Tape Dimensions:**



(unit :mm)

Index	Ao	Bo	$\Phi D$	T	W
Dimension (mm)	$1.81 \pm 0.10$	$3.42 \pm 0.10$	$1.55 \pm 0.05$	$1.26 \pm 0.10$	$8.20 +0.10$ $-0.30$
Index	E	F	Po	P1	P2
Dimension (mm)	$1.75 \pm 0.10$	$3.50 \pm 0.05$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$

### E. Recommended Reflow Profile:

Typical examples of soldering processes that provide reliable joints without any damage are given in Fig. This product could sustain by reflow process three times, and the temperature below 260 °C.

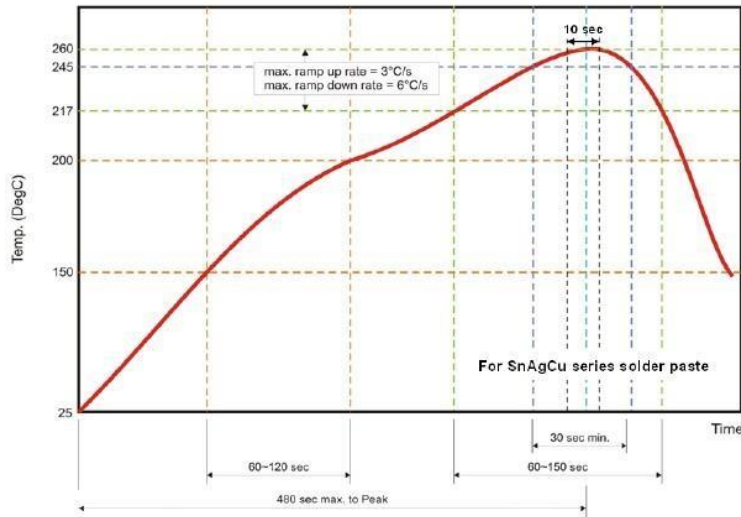


Fig . Infrared soldering profile