



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

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## Product Specifications Approval Sheet

Product Description: LTCC Filter 2450/5425 MHz Size 1.6x0.8 mm

TST Part No.: TL0041AA0094

Customer Part No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Hong Pu Lin *Hong Pu Lin*

Approved by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2020/08/29

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 change



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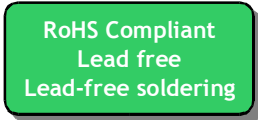
## LTCC Filter 2450/5425 MHz Size 1.6X0.8 mm

MODEL NO.: TL0041AA0094

REV.1

### A. MAXIMUM RATING:

1. Operating temperature range: -40 °C to +85 °C
2. Storage temperature range: -40 °C to +85 °C
3. Impedance : 50Ω
4. Moisture Sensitive Level: Level 1 (MSL1) (Refer to : IPC/JEDEC J-STD-020)



### B. ELECTRICAL CHARACTERISTICS:

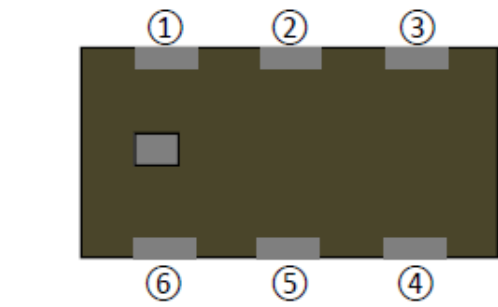
Lower Band

Item	Specifications
Frequency Range	2400 ~ 2500 MHz
Insertion Loss	≤ 0.9 dB
Return Loss (in BW)	≥ 13 dB (2400 ~ 2500 MHz)
Attenuation	≥ 17 dB(700 ~ 1300 MHz) ≥ 25 dB(4800 ~ 5000 MHz) ≥ 27 dB(7200 ~ 7500 MHz)
In/Output Impedance	50Ω

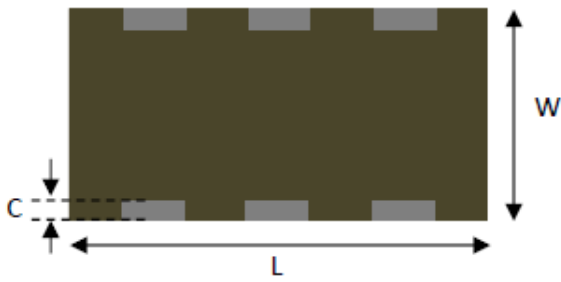
Higher Band

Parameters	Specifications
Frequency Range	4900 ~ 5950 MHz
Insertion Loss	≤ 1.1 dB
Return Loss (in BW)	≥ 13 dB (4900 ~ 5950 MHz)
Attenuation	≥ 25 dB(1200 ~ 1500 MHz) ≥ 26 dB(1600 ~ 2000 MHz) ≥ 25 dB(2300 ~ 3000 MHz) ≥ 28 dB(10000 ~ 12000 MHz) ≥ 20 dB(15000 ~ 16500 MHz) ≥ 10 dB(16500 ~ 18000 MHz)
In/Output Impedance	50Ω

**C. OUTLINE DRAWING:**

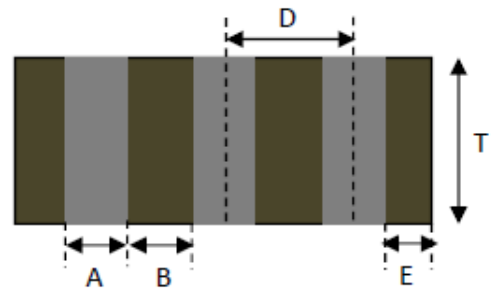


( Top View )



( Bottom View )

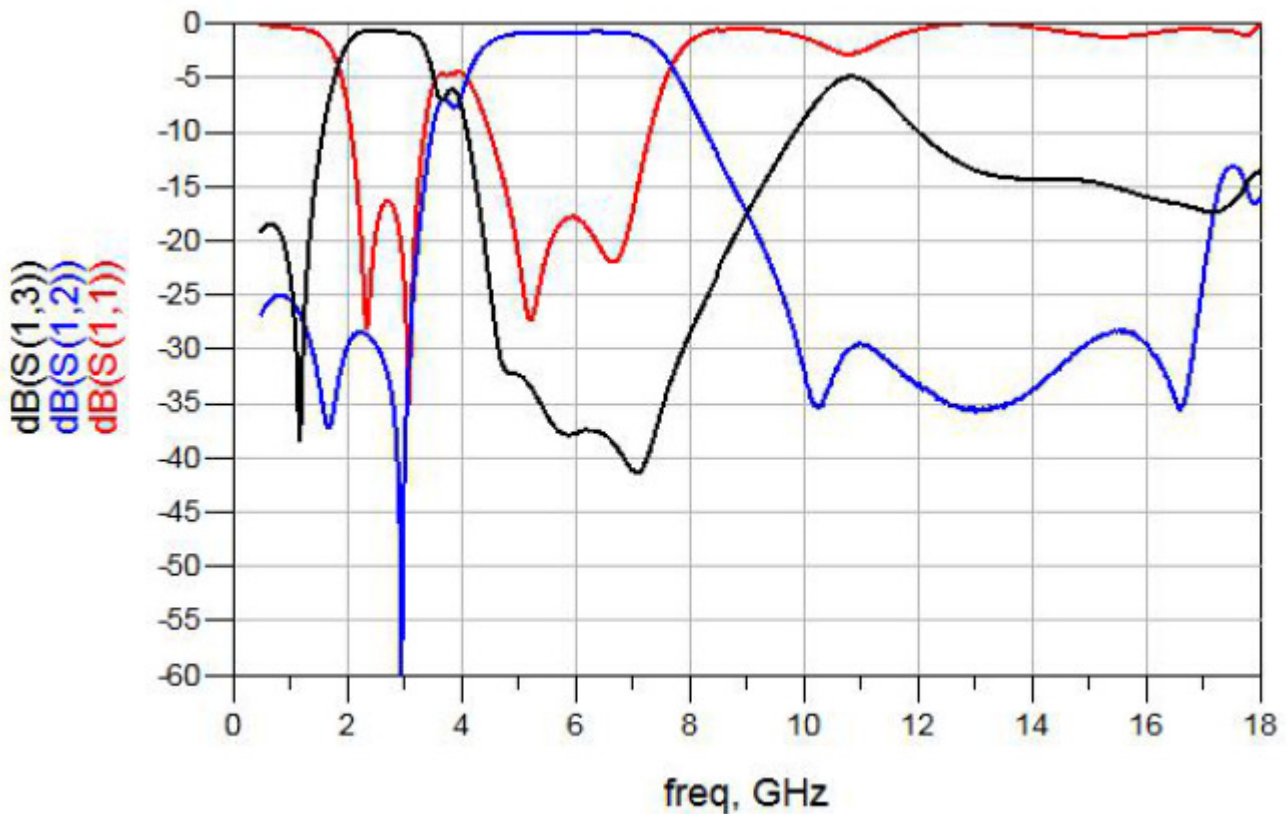
Number	Terminal Name	Number	Terminal Name
①	GND	④	Low band
②	Common port	⑤	GND
③	GND	⑥	High band



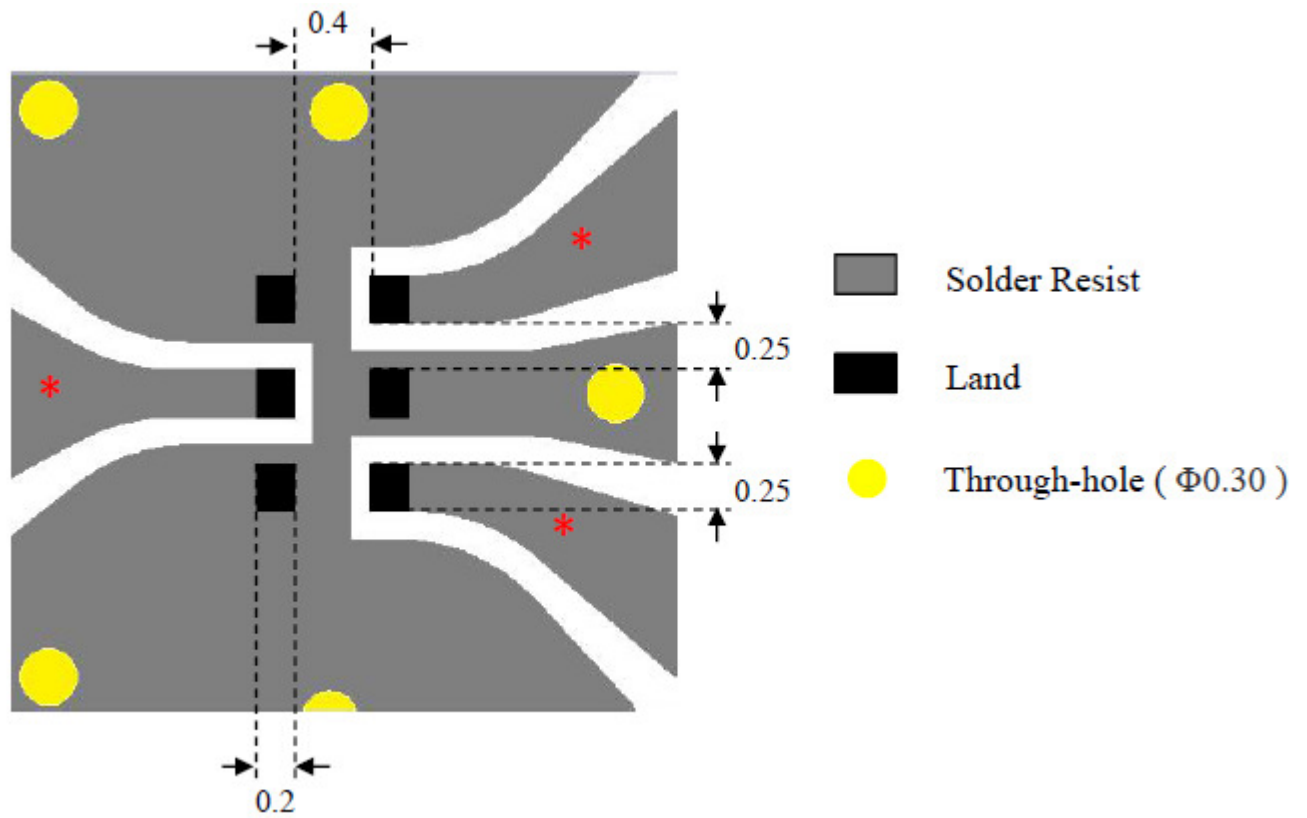
( Side View )

Symbols	L	W	T	A	B	C	D	E
Dimensions	1.6+/-0.2	0.8+/-0.2	0.6+/-0.2	0.25+/-0.1	0.25+/-0.1	0.2+/-0.1	0.5+/-0.1	0.175+/-0.1

**D. FREQUENCY CHARACTERISTICS:**



**E. PCB FOOT PRINT:**

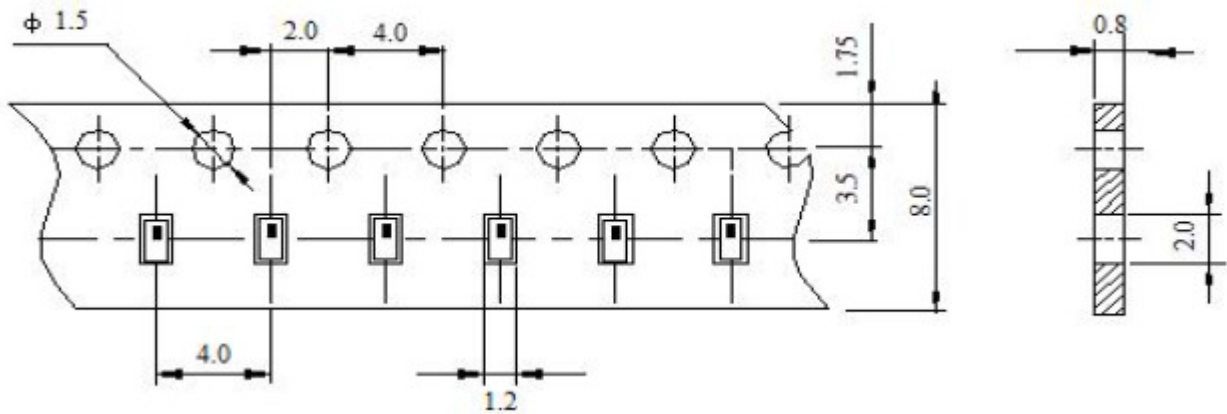


Unit: mm

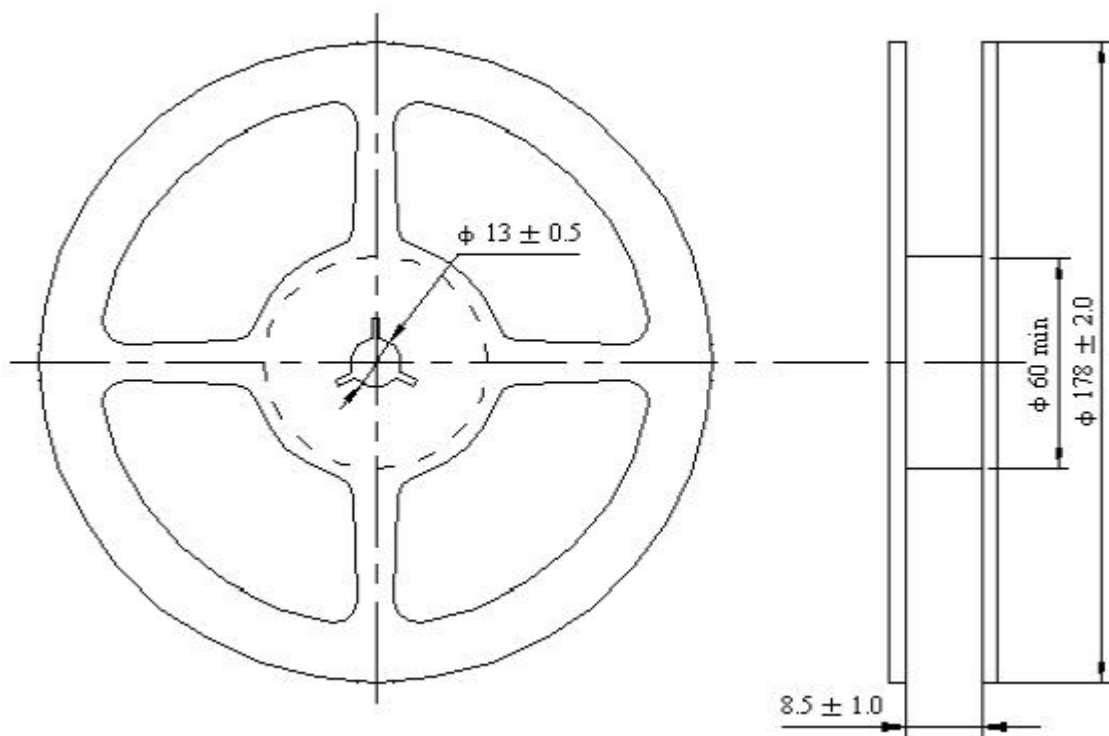
Line width should be designed to match 50 $\Omega$  characteristic impedance , depending on PCB material and thickness.

## F. PACKING:

### 1. TAPE DIMENSION



### 2. REEL DIMENSION



### G. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

