

# 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

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

# **Product Specifications Approval Sheet**

Product Des	cription: LTCC Filter 245	0 MHz SMD 2.0	x1.25 mm (100MHz BW)
TST Part No	.: TL0009A		
Customer Pa	art No.:		
	Customer signature require	ed	
	Company:		
	Division:		
	Approved by :		
	Date:		
Che	ecked by:	Jia Yu Fan	Jia Tu
Арр	proved by:	Andy Yu	Andy In
Dat	e:	2021/08/12	

TAI-SAW TECHNOLOGY CO., LTD.

3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be

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.

released to reflect the change.

**TST DCC** Release document



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### LTCC Filter 2450 MHz SMD 2.0X1.25 mm (100 MHz BW)

MODEL NO.:TL0009A REV.2.0

#### A. MAXIMUM RATING:

1. Operating temperature range: -40°C to +85°C

2. Storage temperature range: -40 °C to +85 °C

3. Moisture Sensitive Level: Level 1 (MSL1)

RoHS Compliant
Lead-free soldering

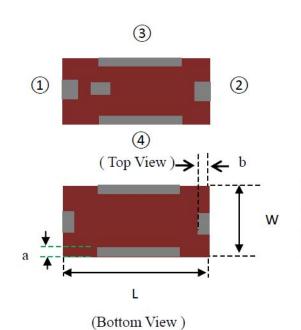
Electrostatic Sensitive Device (ESD)

#### **B. ELECTRICAL CHARACTERISTICS:**

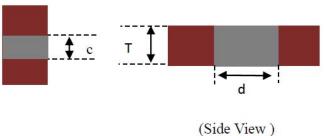
Source impedance (unbalanced) :  $Zs = 50 \Omega$ Load Impedance (balanced) :  $ZL = 50 \Omega$ 

Item	Unit	Spec	
Frequency Range	MHz	2450	
Incortion I and (2400 - 2500 MHz)	٩D	≦1.5dB (at 25°C±5°C)	
Insertion Loss (2400 ~ 2500 MHz)	dB	≦2.0dB (at -40°C~85°C)	
Band Width	MHz	fo±50.0	
V.S.W.R(in BW)		≦2.0	
	dB	≥30dB (880 ~ 915 MHz)	
		≥30dB (1710 ~ 1785 MHz)	
Attenuation		≥25dB (1850 ~ 1910 MHz)	
		≥25dB (4800 ~ 5000 MHz)	
		≥15dB (7200 ~ 7500 MHz)	
Permissible Input Power	W	0.5	
In/Output Impedance	Ω	50	

#### C. Outline Drawing:

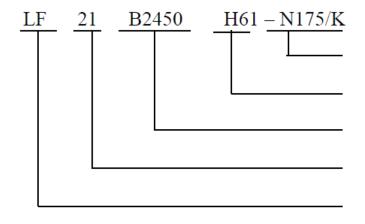


Number	Terminal Name			
1				
2	OUTPUT			
3	GND			
4	GND			



(Unit: mm)

Symbols	L	W	T	a	b	С	d
Dimensions	2.0+/-0.2	1.25+/-0.2	0.95+/-0.2	0.2+/-0.1	0.3+/-0.1	0.3+/-0.1	1.3+/-0.1



Normal Type: N175/K

Via Design Series: H61

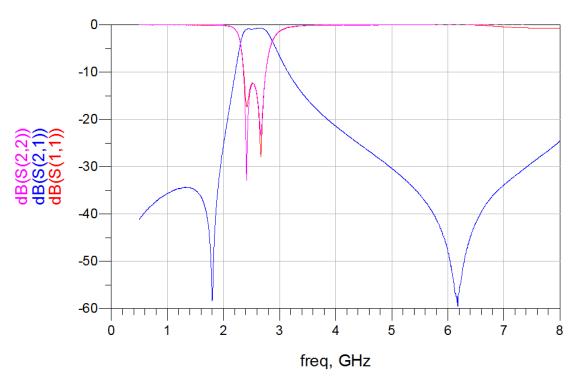
Band Pass Filter: 2450MHz

Size:  $2.0 \times 1.25 \times 0.95$ 

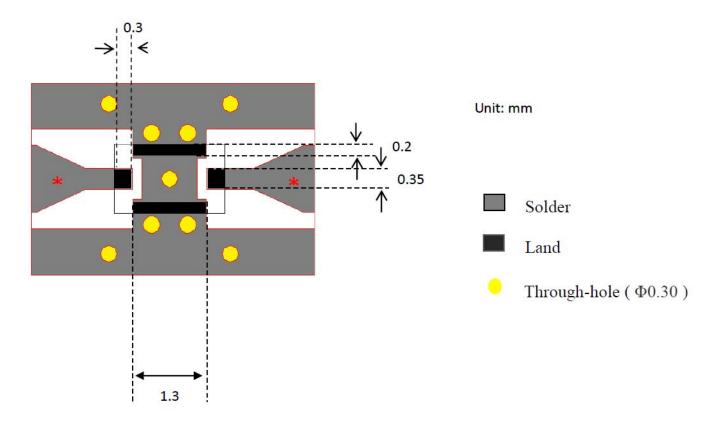
Multi-layer Filter

### D. FREQUENCY CHARACTERISTICS:

### **Frequency Response**



#### E. PCB Footprint

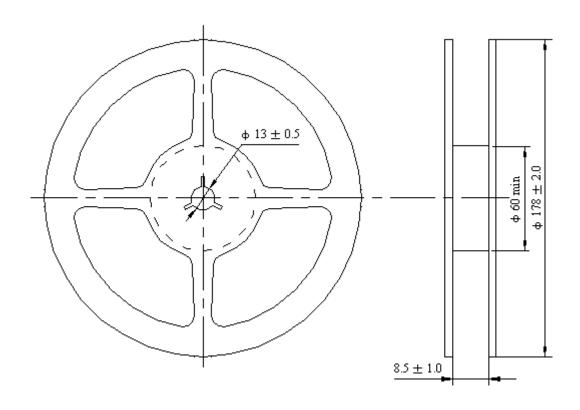


\*Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

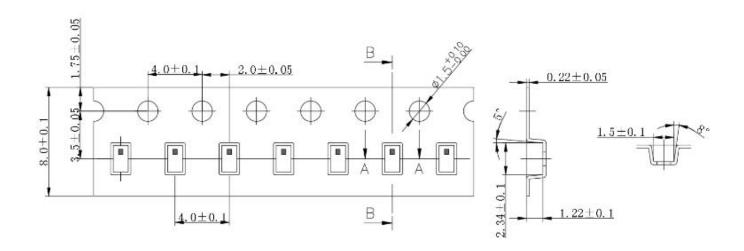
### F. PACKING:

1. REEL DIMENSION (4000 PCS/Reel)

## (Please refer to FR-75D10 for packing quantity)



#### 2. TAPE DIMENSION



### **G** . <u>RECOMMENDED REFLOW PROFILE</u>:

