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 1880 ~ 2025(1952.5) MHz SMD 1.6x0.8 mm (145MHz BW)

TST Part No.: TL0031A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Hongpu Lin Hong Pu Lin

Approved by:_____ Andy Yu Andy Yu

Date:_____ 2019/04/18

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 1880 ~ 2025(1952.5) MHz SMD 1.6X0.8 mm (145 MHz BW)

MODEL NO.:TL0031A REV.1

RoHS Compliant
Lead free
Lead-free soldering

A. MAXIMUM RATING:

1. Operating temperature range: -40℃ to +85℃
2. Storage temperature range: -40 ℃ to +85 ℃
3. Moisture Sensitive Level: Level 1 (MSL1)

Electrostatic **S**ensitive **D**evice (**ESD**)

B. ELECTRICAL CHARACTERISTICS:

Source impedance (unbalanced) : Zs = 50 Ω
Load Impedance (balanced) : Z_L = 50 Ω

Item	Unit	Spec
Frequency Range	MHz	1880 ~ 2025(1952.5)
Insertion loss	dB	1.1 typ.
VSWR		1.2 typ.
Attenuation (Reference level from 0 dB)		
2400 ~ 2500 MHz	dB	29 Min
4020 ~ 4045 MHz	dB	20 Min
6030 ~ 6075 MHz	dB	29 Min

C. Outline Drawing:

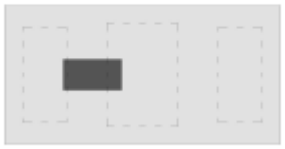
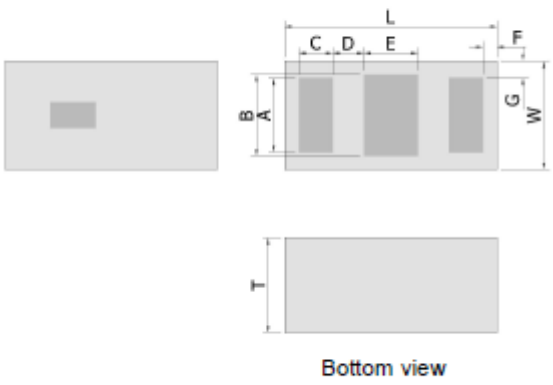
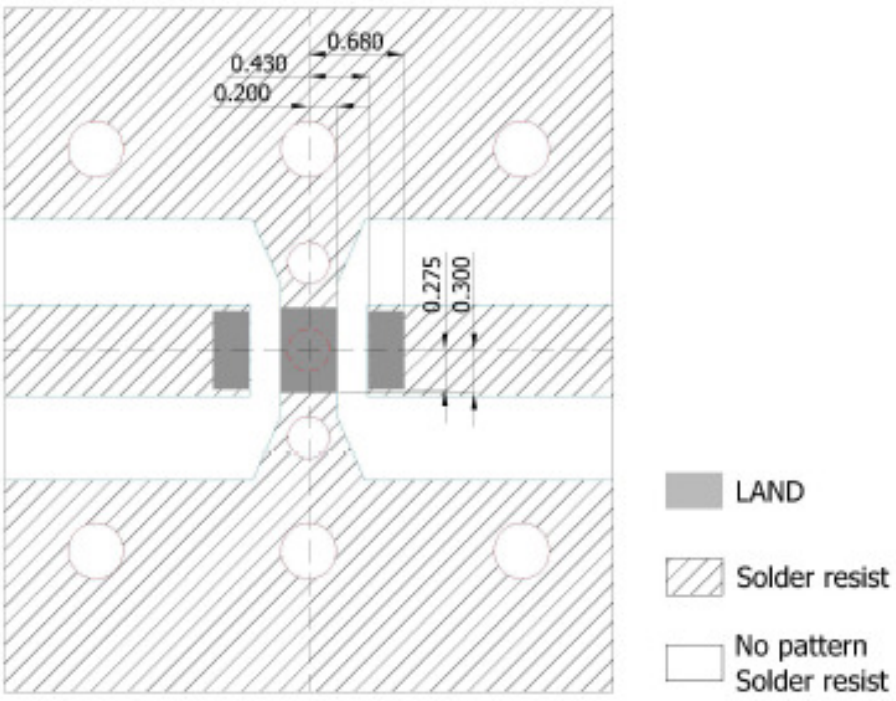
Figure	PIN	Connection
Top view 	1	Input port
	2	GND
	3	Output port

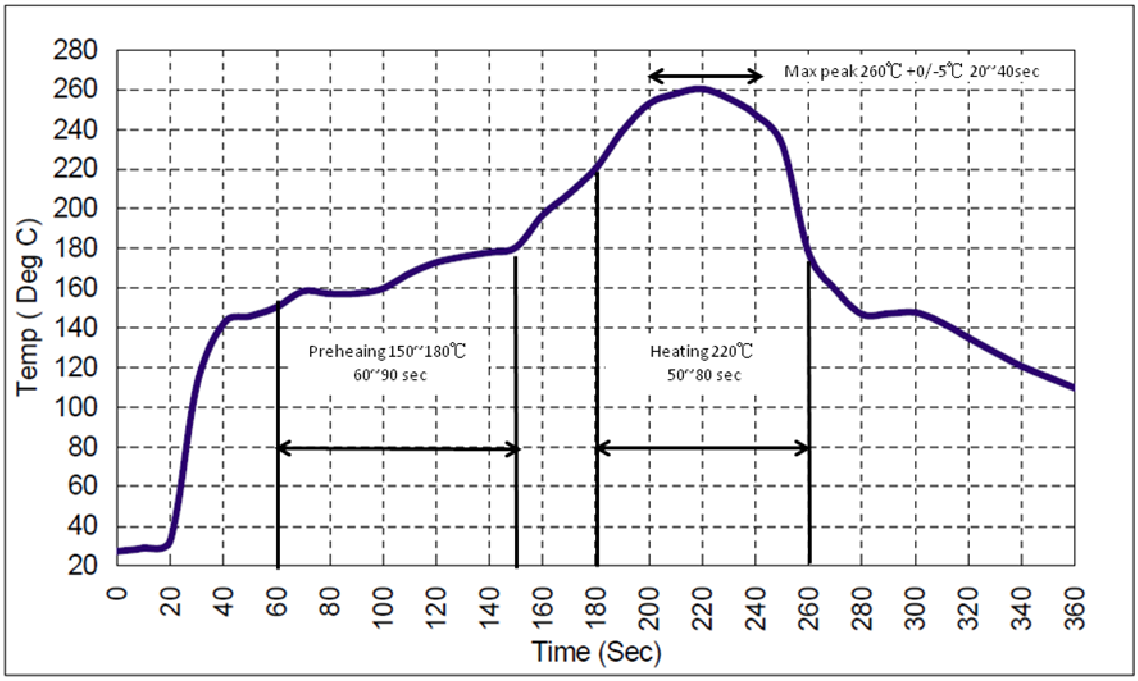
Figure	Symbol	Dimension (mm)
Top view Bottom view  Bottom view	L	1.60 ± 0.10
	W	0.80 ± 0.10
	T	0.7 max.
	A	0.55 ± 0.10
	B	0.60 ± 0.10
	C	0.25 ± 0.10
	D	0.23 ± 0.10
	E	0.40 ± 0.10
	F	0.12 ± 0.10
	G	0.125 ± 0.10

D. PCB Footprint:



UNIT:mm

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

E. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 245~260℃ peak (min. 10sec).
4. Time : 2 times.