



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: LTCC Filter 824 ~ 915(869.5) MHz SMD 1.0x0.5 mm (91MHz BW)

TST Part No.: TL0027A

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 824 ~ 915(869.5) MHz SMD 1.0X0.5 mm (91 MHz BW)

MODEL NO.: TL0027A

REV.1

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
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

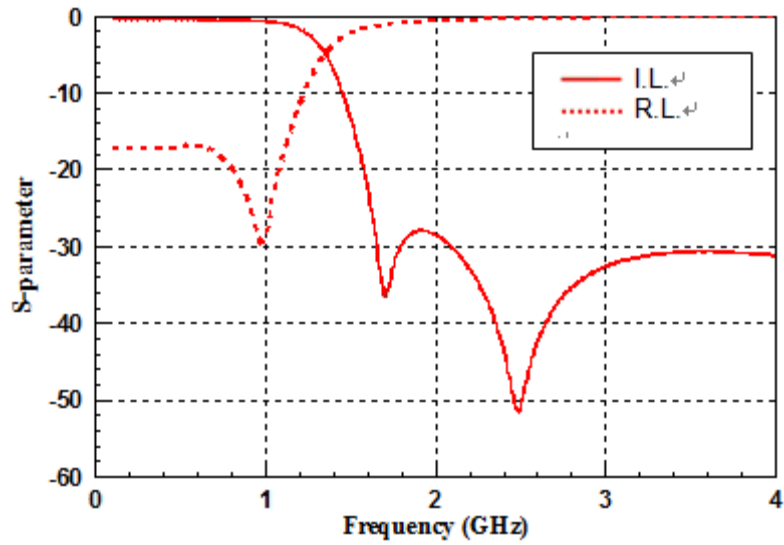
Source impedance (unbalanced) : $Z_s = 50 \Omega$

Load Impedance (balanced) : $Z_L = 50 \Omega$

Item	Unit	Spec
Frequency Range	MHz	824~915(869.5)
Insertion loss	+25°C	0.65 Max
	-40°C ~ +85°C	0.85 Max
Attenuation (Reference level from 0 Db)		
1648 ~ 1830 MHz	dB	25 Min
2472 ~ 2745 MHz	dB	25 Min
3296 ~ 3660 MHz	dB	25 Min
VSWR		2.0 Max

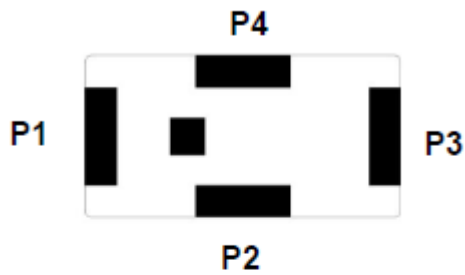
C. FREQUENCY CHARACTERISTICS:

Frequency Response



D. Outline Drawing:

CONSTRUCTION

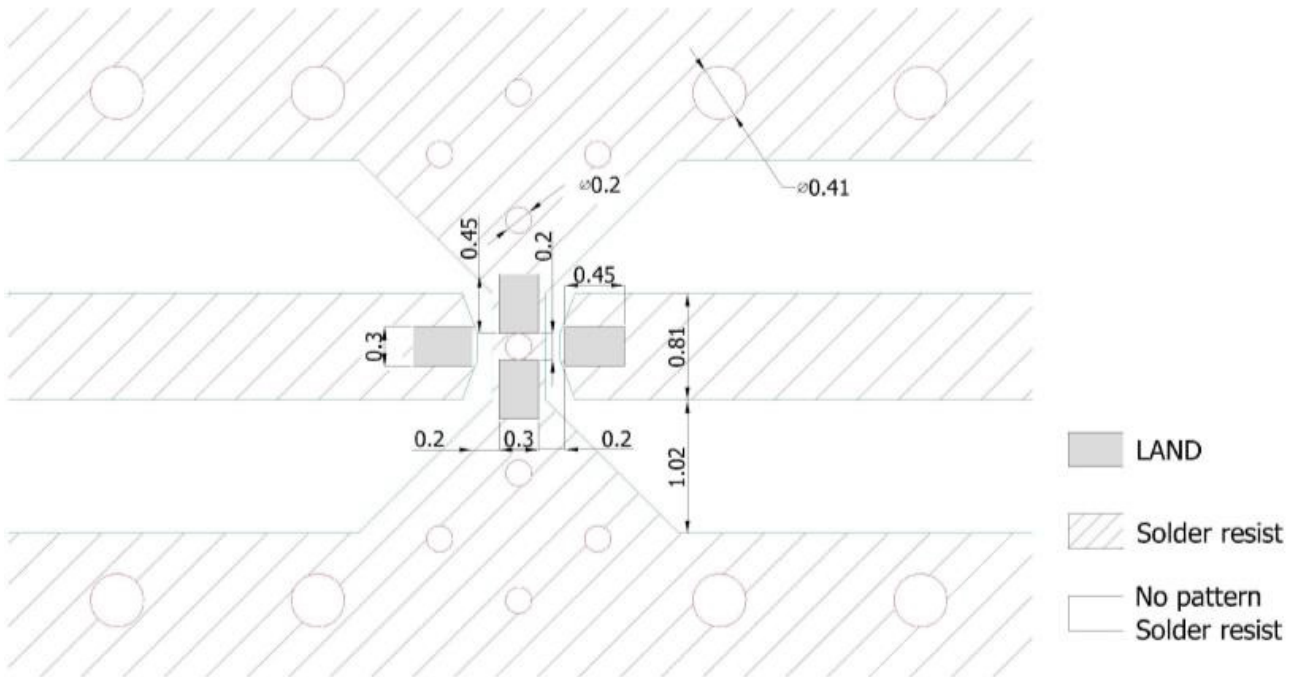


PIN	Connection
1	Input port
2	GND
3	Output port
4	GND

DIMENSIONS

Figure	Symbol	Dimension (mm)
	L	1.00 ± 0.10
	W	0.50 ± 0.10
	T	0.40 ± 0.10
	A	0.35 ± 0.10
	B	0.30 ± 0.10
	C	0.15 ± 0.10
	D	0.15 ± 0.10
	E	0.30 ± 0.10

E. PCB Footprint:



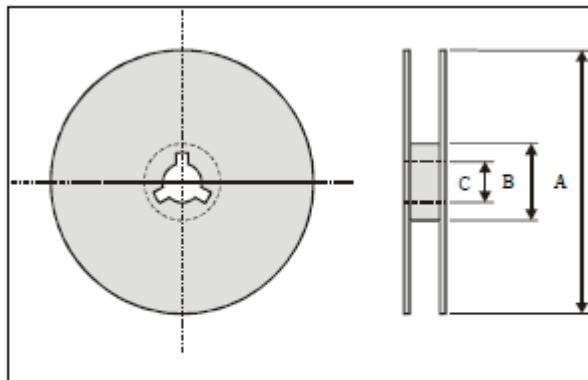
Unit : mm

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

F. PACKING:

1. REEL DIMENSION (4000 PCS)

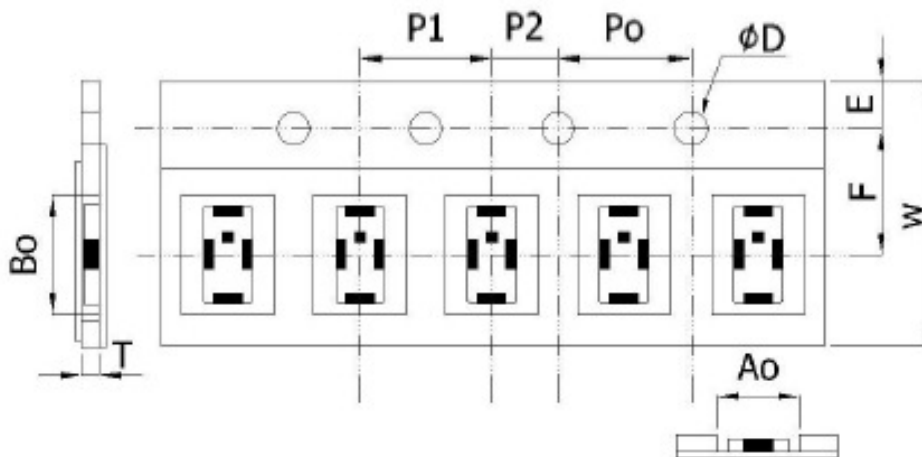
(Please refer to FR-75D10 for packing quantity)



Index	A	B	C
Dimension (mm)	Φ178.0	Φ60.0	Φ13.0

2. TAPE

DIMENSION (unit :mm)



Paper Tape specifications (unit :mm)

Index	Ao	Bo	ΦD	T	W
Dimension (mm)	0.67 ± 0.10	1.14 ± 0.10	1.50 + 0.10	0.42 ± 0.10	8.0 ± 0.30
Index	E	F	Po	P1	P2
Dimension (mm)	1.75 ± 0.10	3.50 ± 0.20	4.00 ± 0.10	2.00 ± 0.10	2.00 ± 0.10

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 245~260°C peak (min. 10sec).
4. Time : 2 times.

