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 Name: Tx Low Pass 2450 MHz (2400~2500 MHz)

High Pass 5500 MHz (5150~5850MHz) SMD 1.6X0.8 mm (Diplexer filter)

TST Parts No.: TL0017A (This part is compliant with AEC-Q200)

Customer Parts No.:_____

Customer signature required

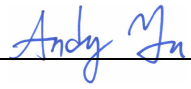
Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Anne Chen 

Approval by:_____ Andy Yu 

Date:_____ 2018/08/16

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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LTCC Filter Low Pass 2450 MHz ,High Pass 5500 MHz

MODEL NO.:TL0017A REV. NO.:1

A. MAXIMUM RATING:

RoHS Compliant
Lead free
Lead-free soldering

1. Input Power Level: 30 dBm
2. DC Voltage : 5V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +85℃
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. No Marking

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

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : Zs = 50 Ω
Terminating load impedance : ZL = 50 Ω

1. Lower Band

Item		Unit	Spec
Frequency Range		MHz	2450±50
Insertion Loss (2400~2500 MHz)	**IL**	dB	0.6 Max(1)
VSWR (2400~2500 MHz)		dB	2.0 Max
Attenuation (Reference level from 0 dB)			
4800 ~ 5000MHz		dB	25 Min
7200 ~ 7500MHz		dB	30 Min
7500 ~ 12000MHz		dB	20 Min

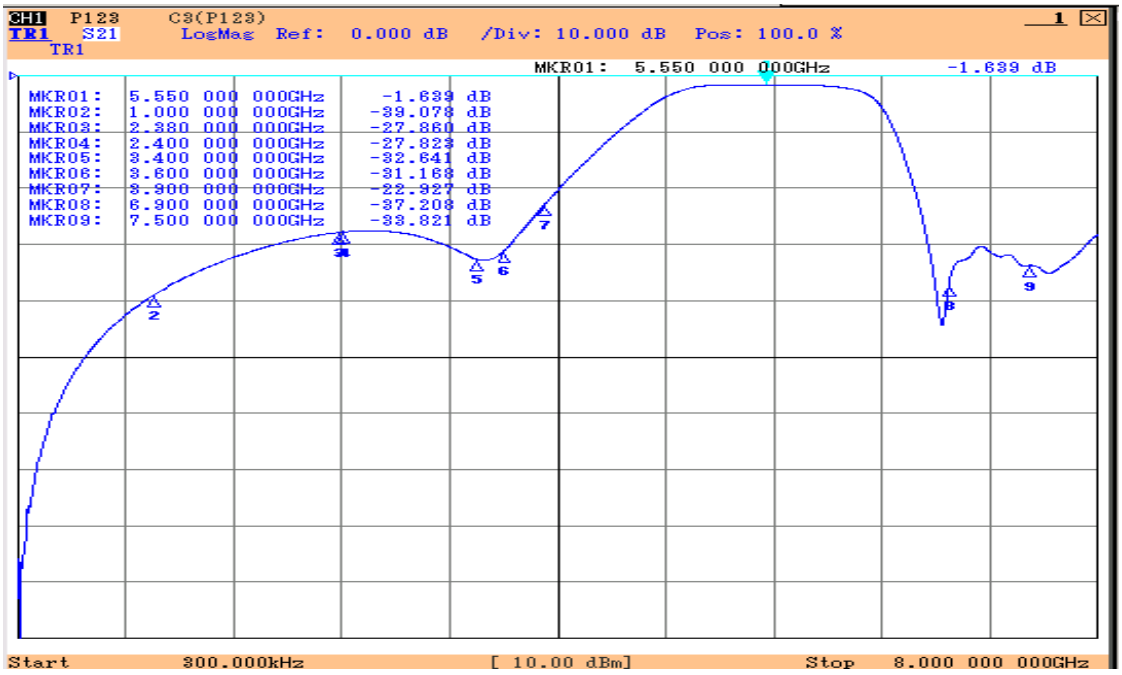
2. Higher Band

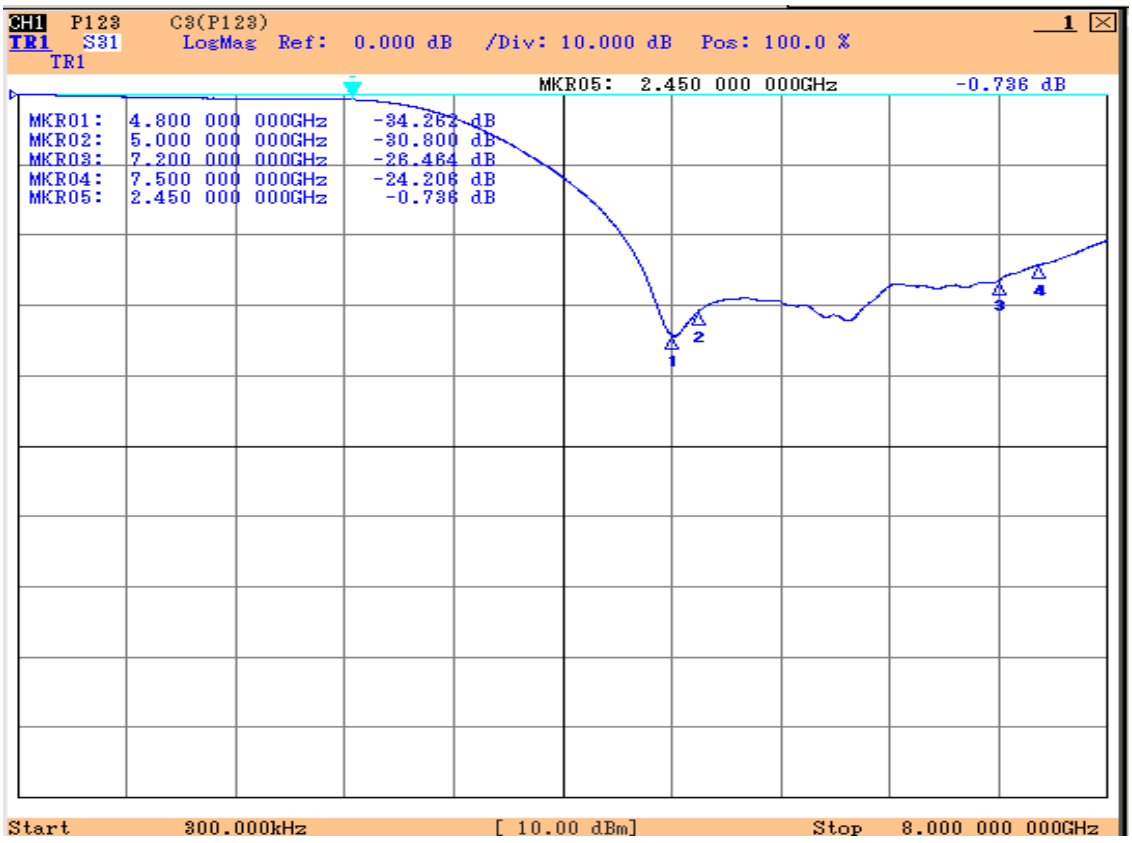
Item		Unit	Spec
Frequency Range		MHz	5500±350
Insertion Loss (5150~5850 MHz)	**IL**	dB	1.5 Max(1)
VSWR (5150~5850 MHz)		dB	2.0 Max
Attenuation (Reference level from 0 dB)			
30 ~ 1000MHz		dB	25 Min
2380MHz		dB	25 Min
2400 ~ 2500MHz		dB	25 Min
3400 ~ 3600MHz		dB	15 Min
3600 ~ 3900MHz		dB	10 Min
6900 ~ 7550MHz		dB	20 Min

7550MHz ~ 10600MHz	dB	30 Min
10600 ~ 11700MHz	dB	30 Min
15300 ~ 16200MHz	dB	20 Min

(1)The spec without PCB loss

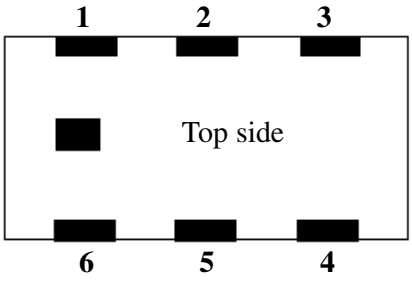
C. Frequency Characteristics : (Characteristic curve)



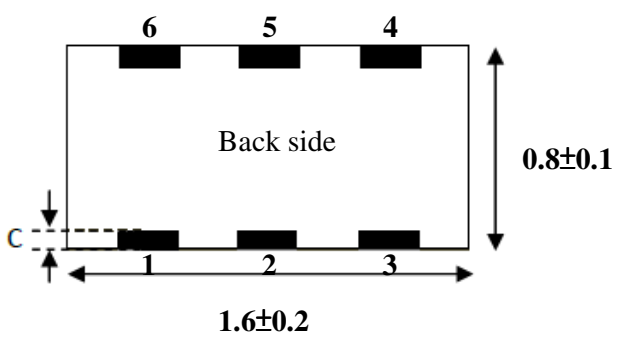


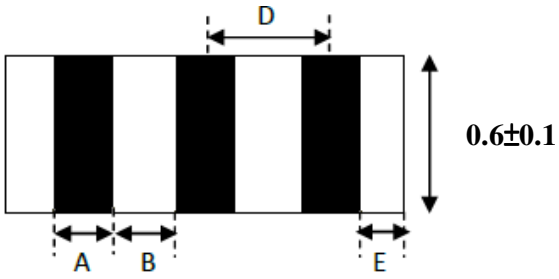
*The loss including PCB loss

D. Pin Assignment : (Diplexer)



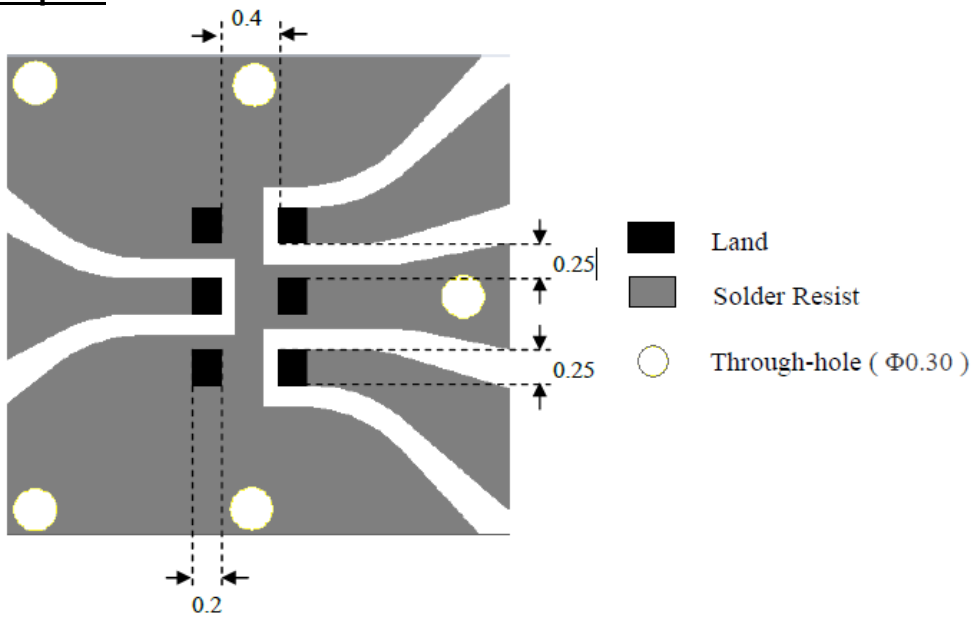
Pin 1 High Port
Pin 3 Low Port
Pin 5 Com Port
Pin 2,4,6 GND





Symbols	A	B	C	D	E
Dimensions	0.25+/-0.1	0.25+/-0.1	0.2+/-0.1	0.5+/-0.1	0.175+/-0.1

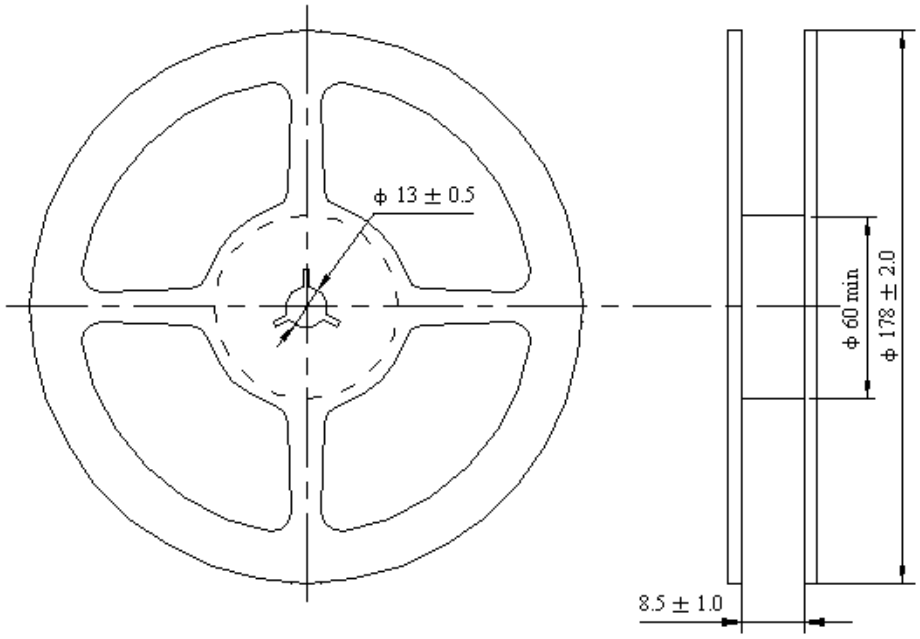
E. PCB Footprint



F. PACKING:

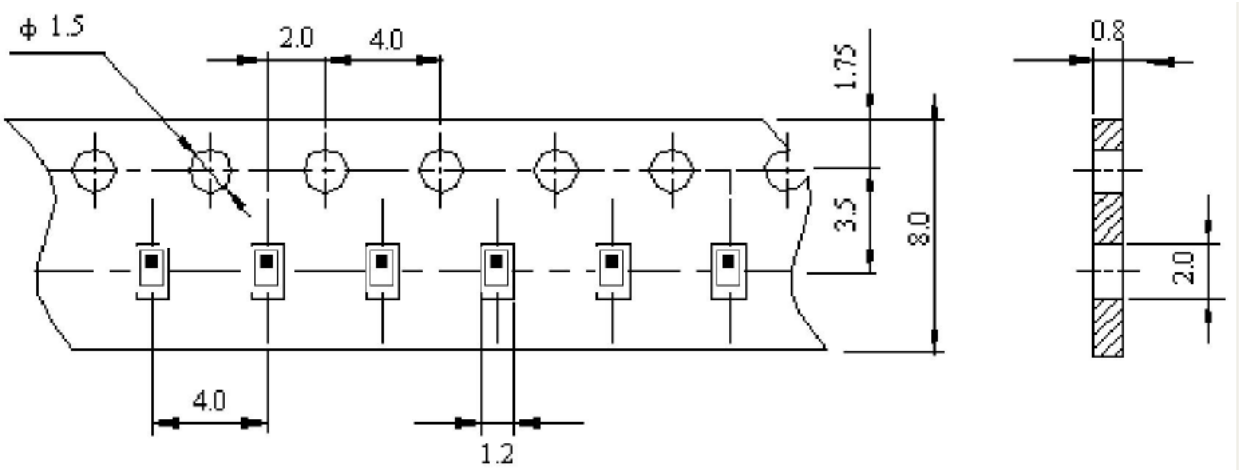
1. REEL DIMENSION **(6000 pcs/Reel)**

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



2. TAPE

DIMENSION



F. <u>RECOMMENDED REFLOW PROFILE</u> :

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.