



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: SAW Rx Filter 2655 MHz LTE Band 7 SMD 1.1x0.9 mm

TST Part No.: TA1847B (This part is compliant by AEC-Q200)

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2018/04/26

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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SAW Filter 2655 MHz

MODEL NO.: TA1847B

REV. NO.:1.0

A. MAXIMUM RATING:

1. Operating temperature range: -40 °C to +85 °C
2. Storage temperature range: -55 °C to +125 °C
3. Maximum Input Power: +10 dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 3 (MSL 3)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

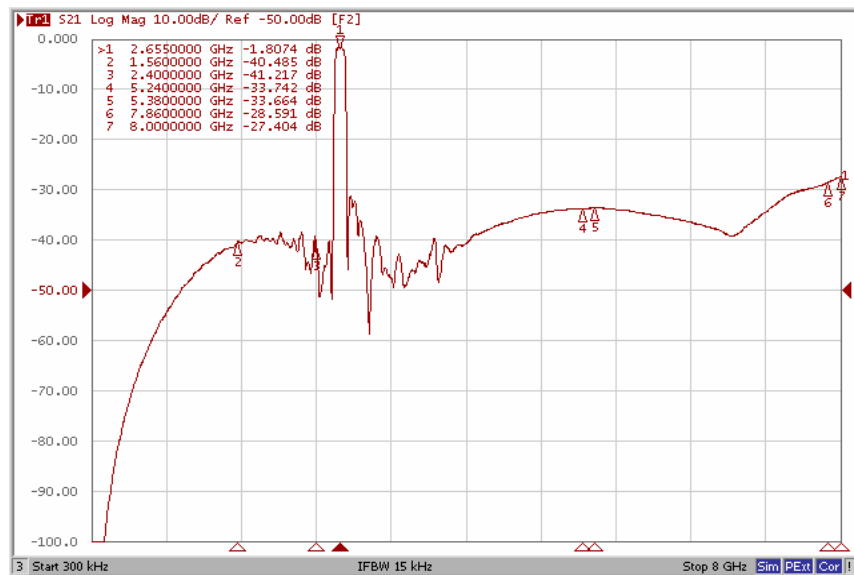
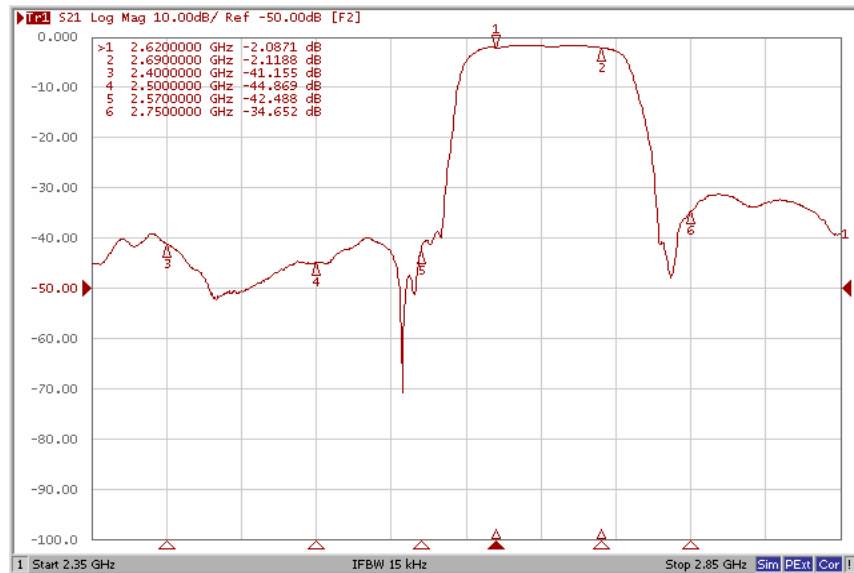
Terminating source impedance: $Z_s = 50//5.1\text{nH } \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 50//5.1\text{nH } \Omega$ (Single-ended)

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency Fc		MHz	-	2655	-
Insertion Loss(*1) (2620~2690 MHz) IL		dB	-	2.5	3.0
Amplitude Ripple (2620~2690 MHz)		dB	-	0.8	1.5
VSWR	Input (2620~2690 MHz)	-	-	1.6	2.0
	Output (2620~2690 MHz)	-	-	1.8	2.2
Attenuation (Reference level from 0 dB)					
1~2400 MHz		dB	30	36	-
45 MHz		dB	50	65	-
2400~2500 MHz		dB	32	37	-
2500~2570 MHz		dB	35	38	-
2570~2600 MHz		dB	2	4	-
2775~6000 MHz		dB	15	30	-
7620~7830 MHz		dB	15	25	-
7860~8000 MHz		dB	15	24	-

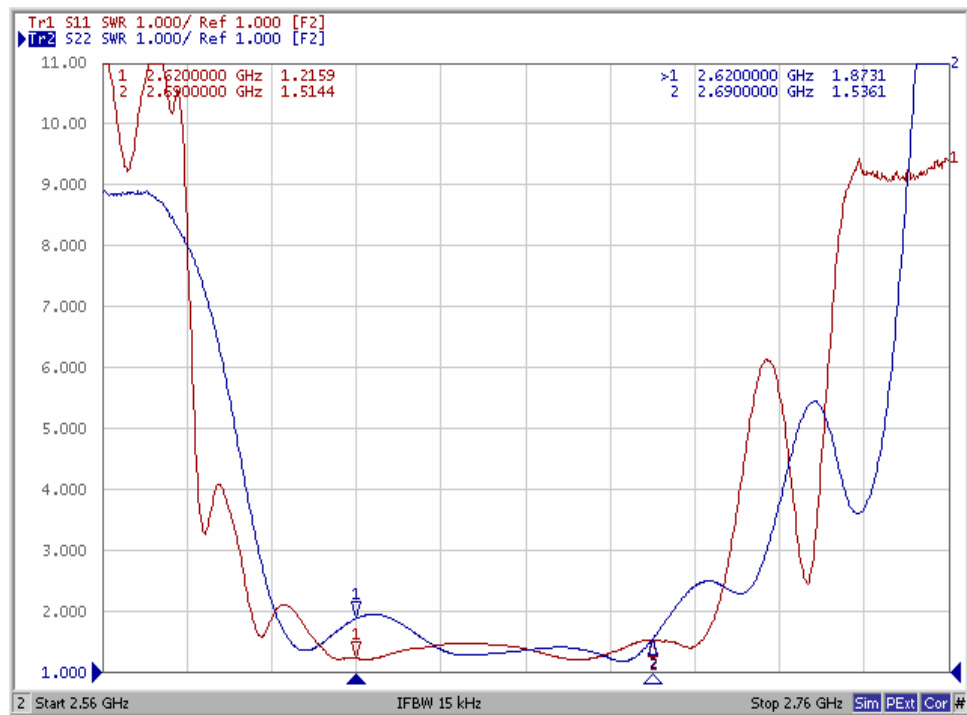
(*1) Specification of insertion loss includes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:

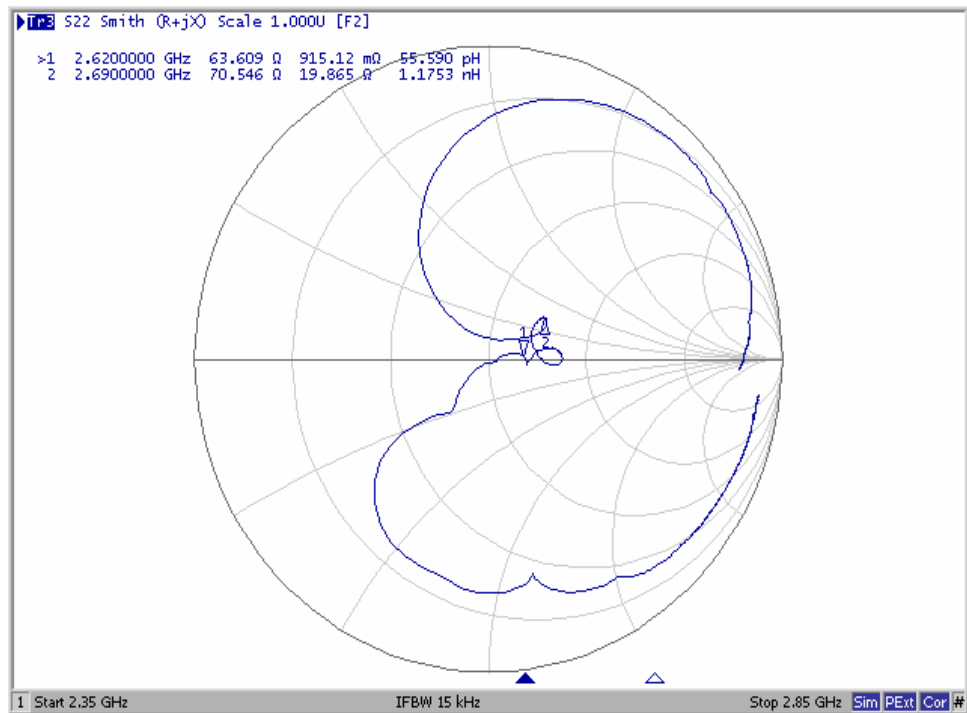
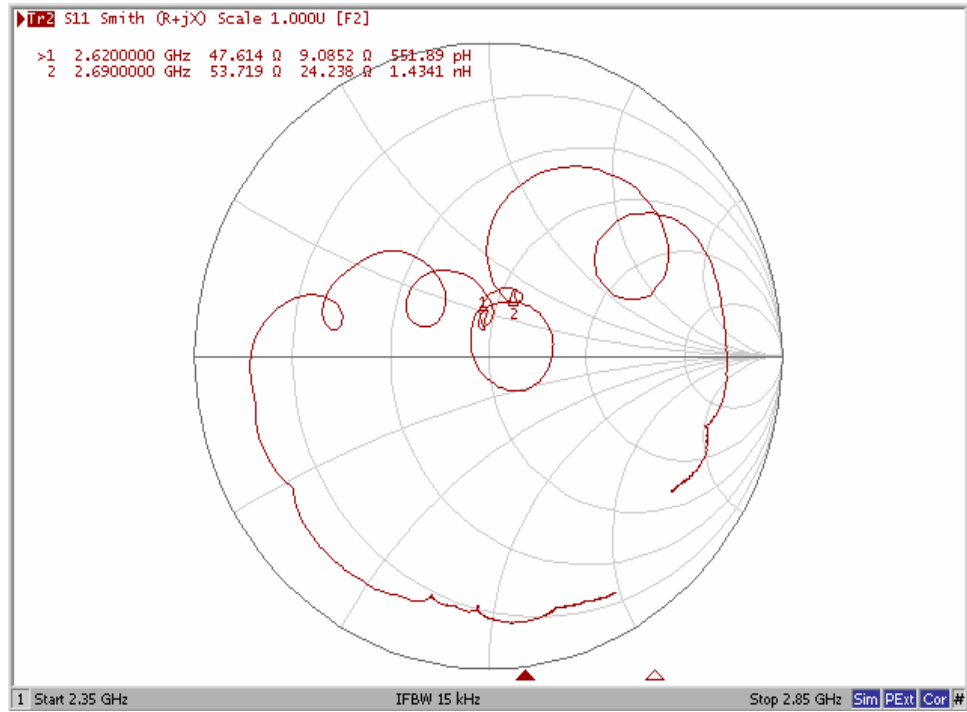


Reflection Functions:

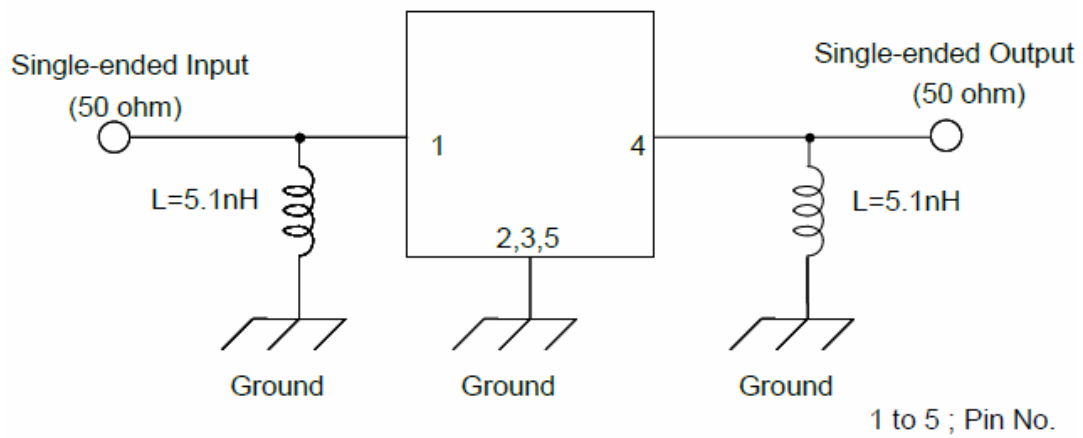
VSWR



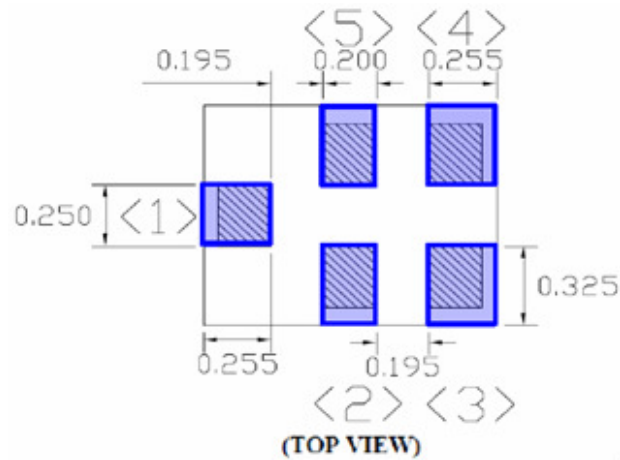
Smith Chart



D. MEASUREMENT CIRCUIT:

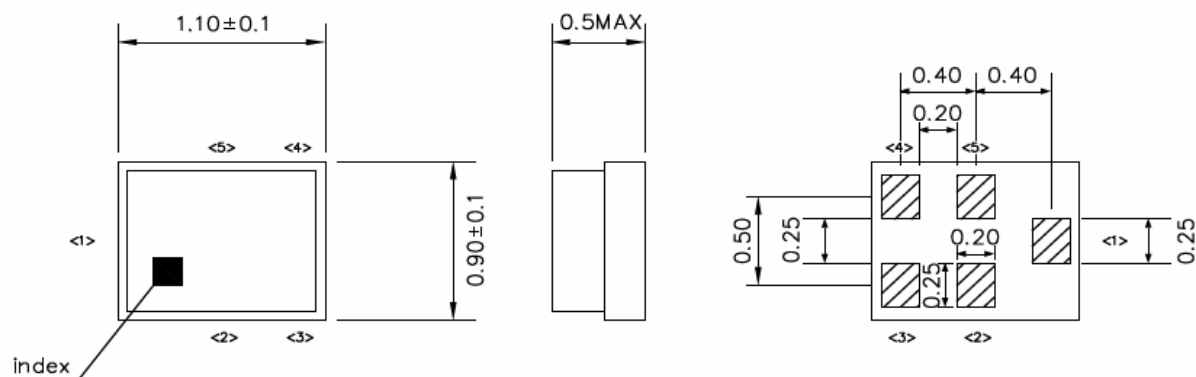


E. PCB Footprint:



F OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.

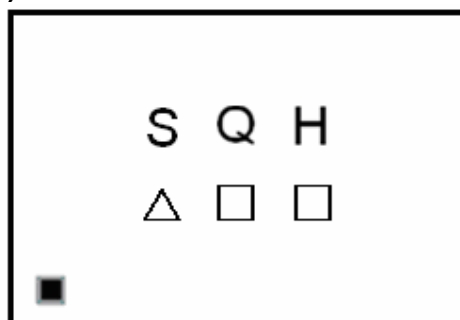


Unit : mm

Pin Configuration

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

Top View (Mass Production):



△ : Date Code

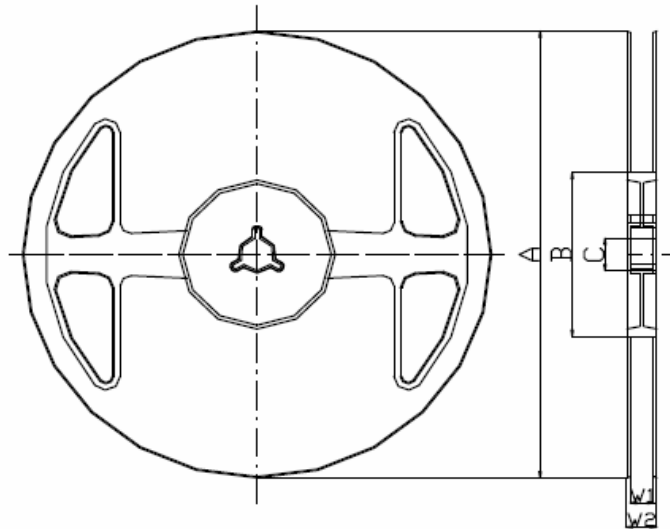
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

G PACKING: (Ref: WI-75M03)

1. REEL DIMENSION



Materials of Reel

Material : Polystyrene + Carbon

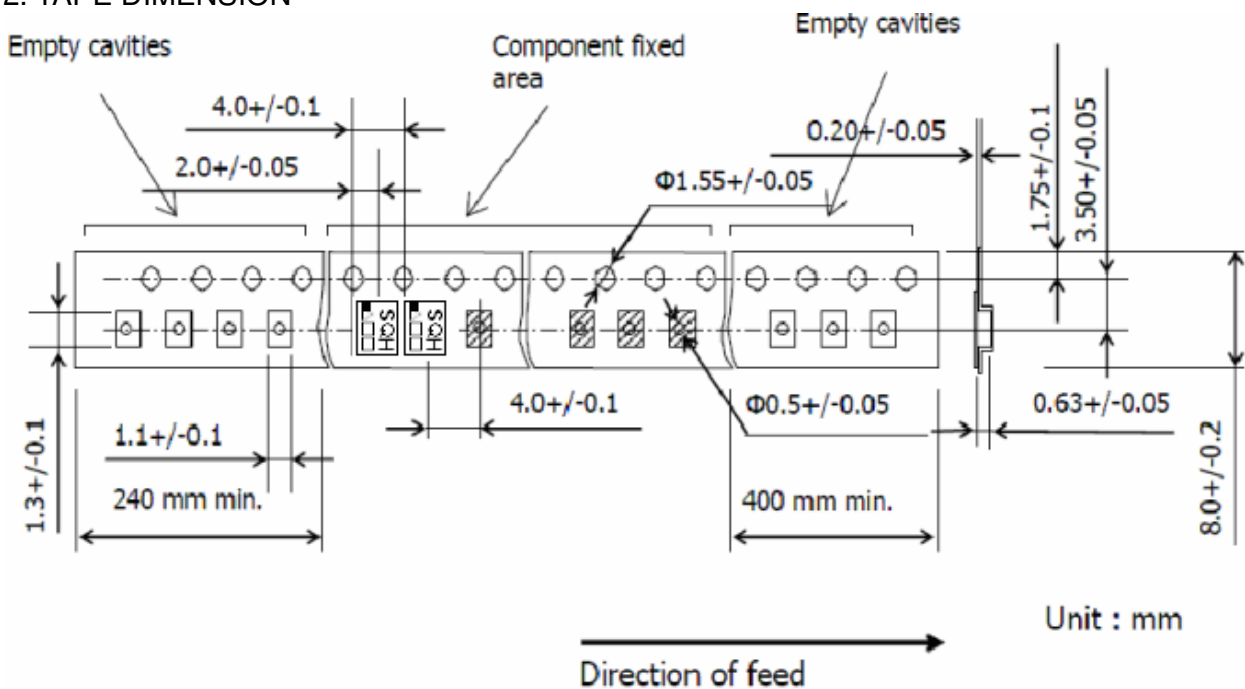
Color : Black

Surface resistance (reference value) : $10^9 \Omega/\text{sq}$ Max.

Unit : mm

Code	Quantity	A	B	C	W1	W2
J	5,000 pcs	$\phi 180.0 +0.0/-1.5$	$\phi 66.0 +/ -0.5$	$\phi 13.0 +/ -0.2$	$9.0 +1.0/-0.0$	$11.4 +/ -1.0$

2. TAPE DIMENSION



H. 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.

