



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Product Specifications Approval Sheet

Product Name: SAW Filter 2140 MHz 60MHz Bw SMD 3.0SQ for W-CDMA

TST Parts No.: TA0174C

Customer Parts No.: \_\_\_\_\_


Customer signature required

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Anne Chen 

Approved by: \_\_\_\_\_ Bob Chau 

Date: \_\_\_\_\_ 05/11/2017

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 2140 MHz 60MHz Bw for Mobile Communication

MODEL NO.: TA0174C

REV. NO.:1

RoHS Compliant  
Lead free  
Lead-free soldering

### A. MAXIMUM RATING:

1. Input Power Level: 13 dB<sub>m</sub>
2. DC voltage: 0 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

Electrostatic Sensitive Device (ESD)

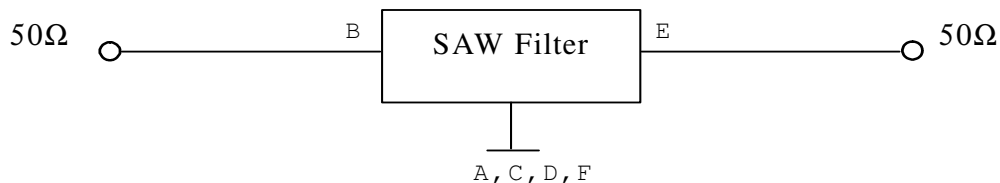
### B. ELECTRICAL CHARACTERISTICS:

Item	Min.	Typ.	Max.
<b>Center frequency</b> <b>F<sub>c</sub></b> (dB)	-	2140	-
<b>Insertion loss</b> within 2110 ~2170 MHz <b>IL</b> (dB)	-	2.1	3.5
<b>Amplitude ripple</b> (p-p) within 2110 ~ 2170 MHz (dB)	-	0.6	2.0
<b>Attenuation</b> (Reference level from 0 dB)			
D.C. ~ 500 MHz (dB)	21.0	33.0	-
500 ~ 1900 MHz (dB)	20.0	28.0	-
1900 ~ 2050 MHz (dB)	25.0	30.0	-
2215 ~ 2300 MHz (dB)	20.0	32.0	-
2300 ~ 4500 MHz (dB)	25.0	32.0	-
<b>VSWR</b> within 2110 ~2170 MHz	-	1.9	2.2
<b>Source impedance</b> <b>Z<sub>s</sub></b> (Ω)	-	50	-
<b>Load impedance</b> <b>Z<sub>L</sub></b> (Ω)	-	50	-

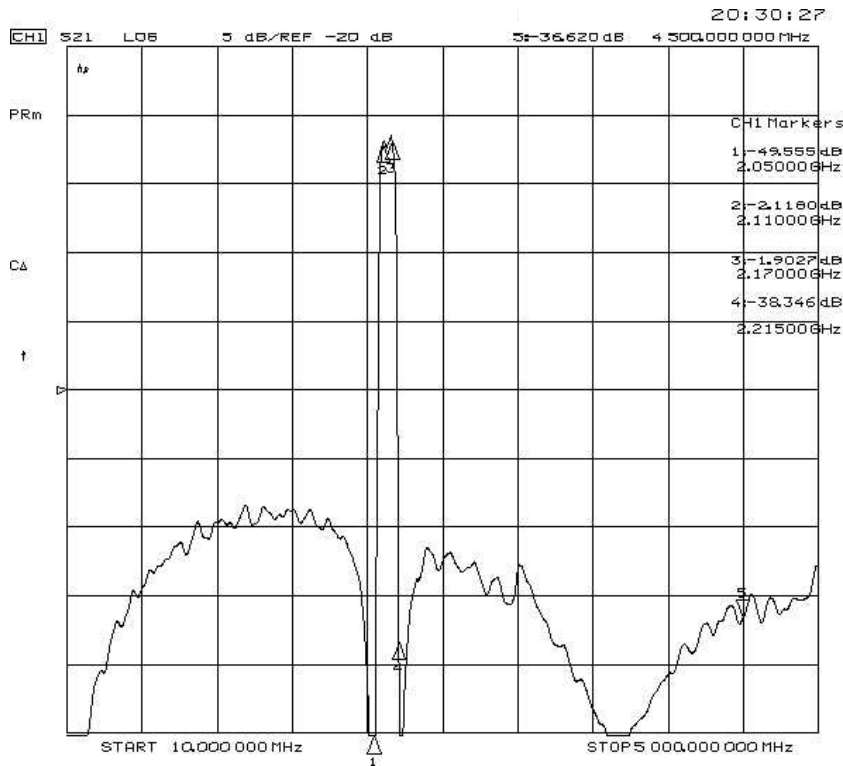
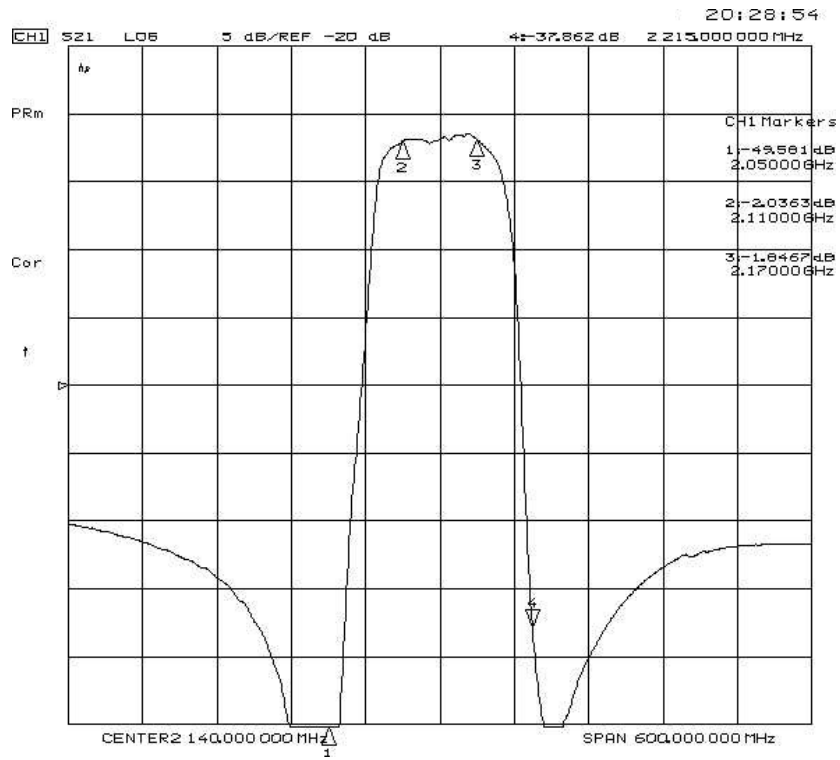
Note1. No matching network required for operation at 50 Ω

### MEASUREMENT CIRCUIT:

HP Network analyzer

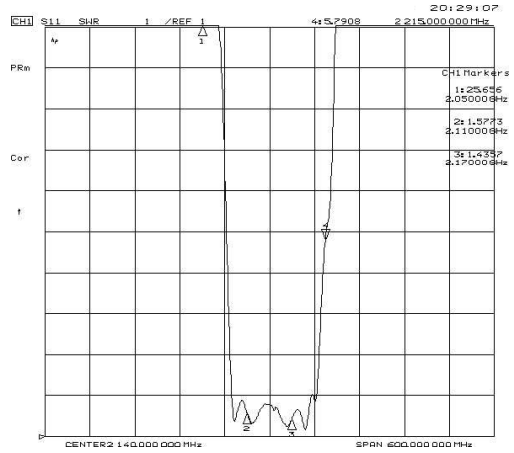
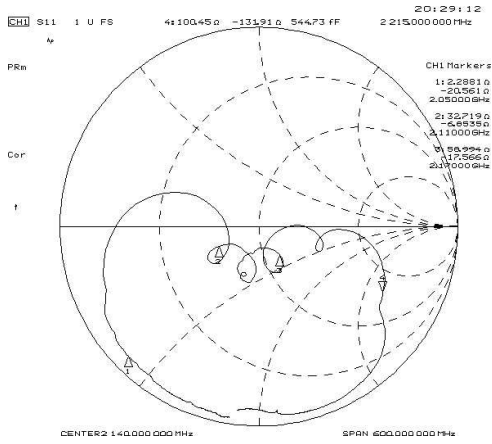


### C. Frequency Characteristics : Transfer function

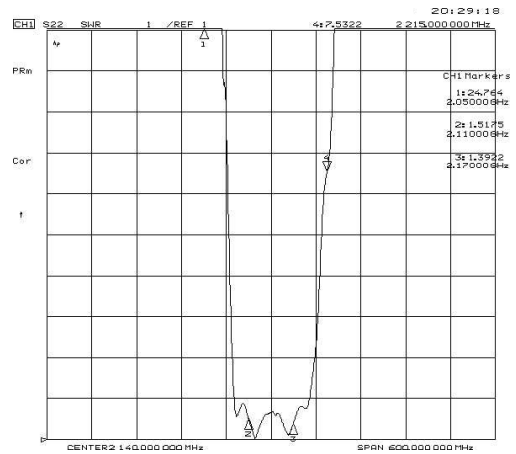
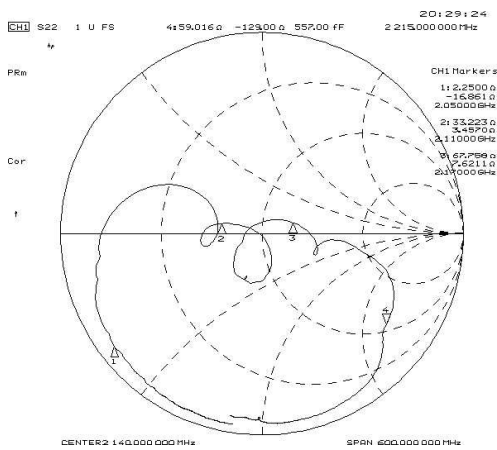


## D.Reflections Functions :

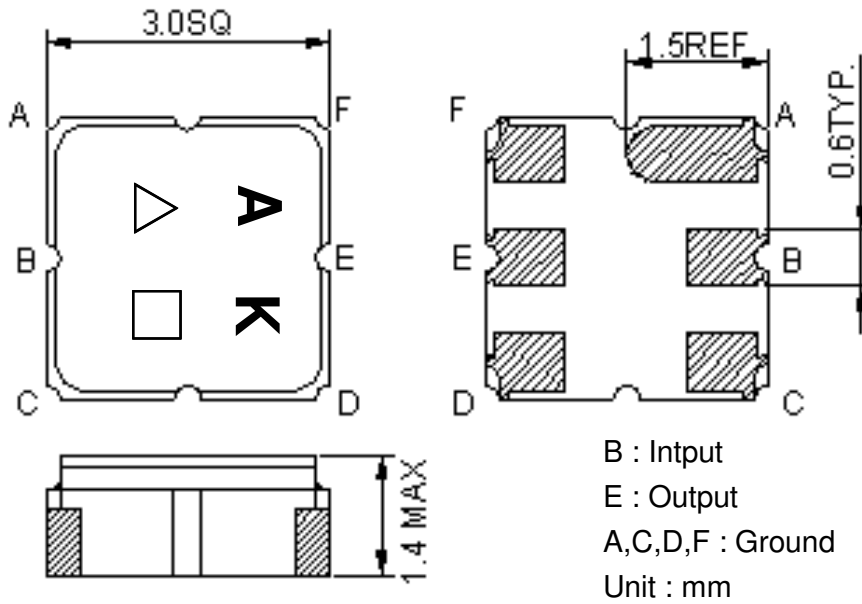
### S11 VSWR



### S22 VSWR



E. OUTLINE DRAWING:



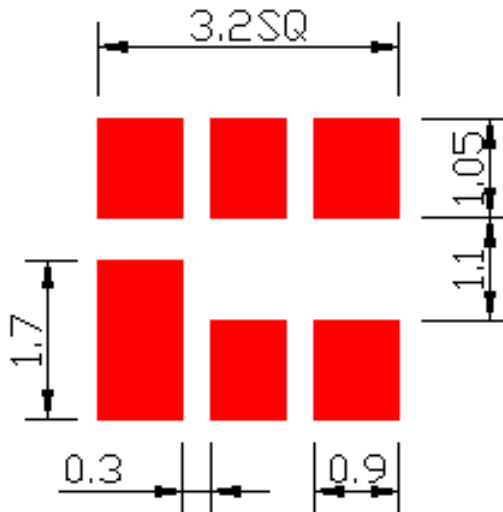
$\triangle$  : Year Code (2011->1, 2012->2, ..., 2019->9)

$\square$  : Date Code (Follow the table from planner each year)

Date Code Table

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

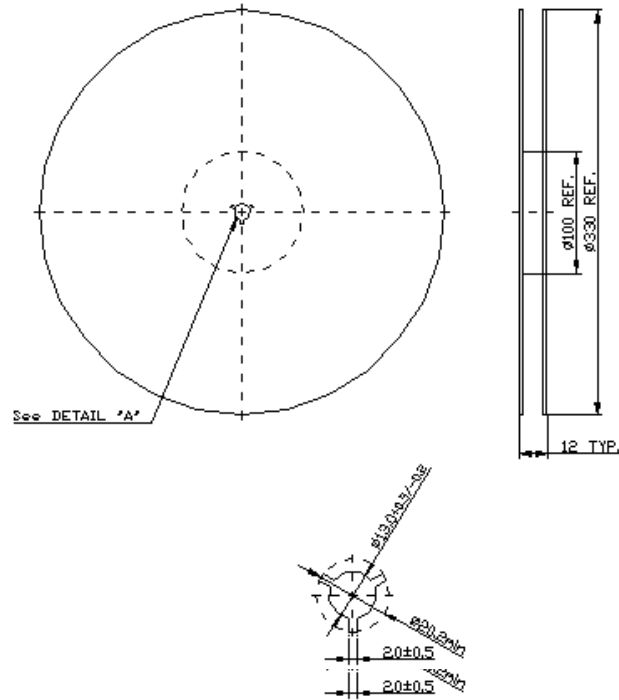
F. LAND PATTERN:



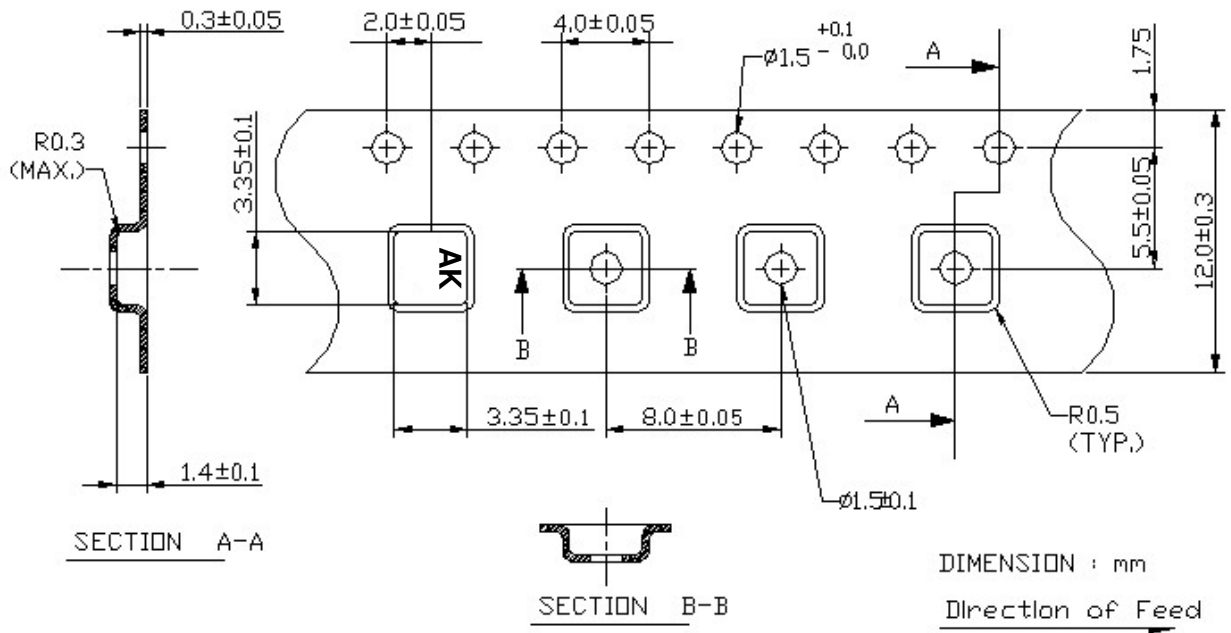
G. PACKING:

1. REEL DIMENSION

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



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

