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 Description: 836.5 MHz 2MHz BW SMD 3.0 x 3.0 mm SAW RF Filter

TST Part No.: TA1415A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee

Approved by: Bob Chau

Date: 03 / 10 / 2014

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.

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

SAW Filter 836.5 MHz

MODEL NO.:TA1415A REV. NO：1.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 12V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

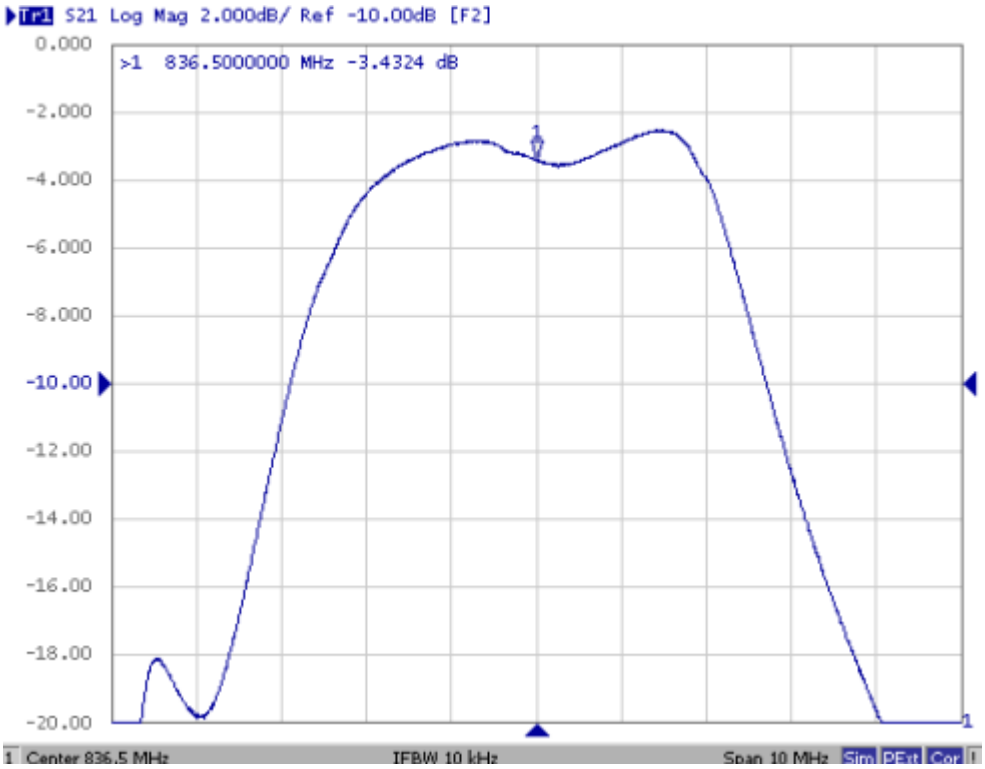
Electrostatic **S**ensitive **D**evice

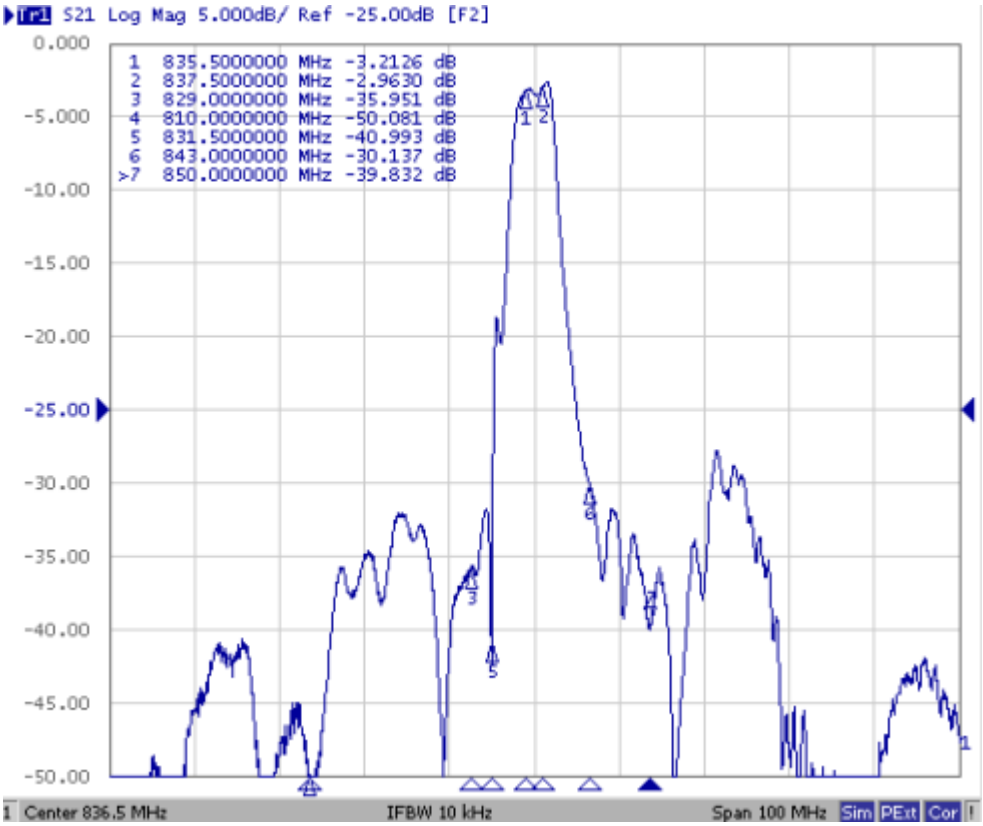
B. ELECTRICAL CHARACTERISTICS：

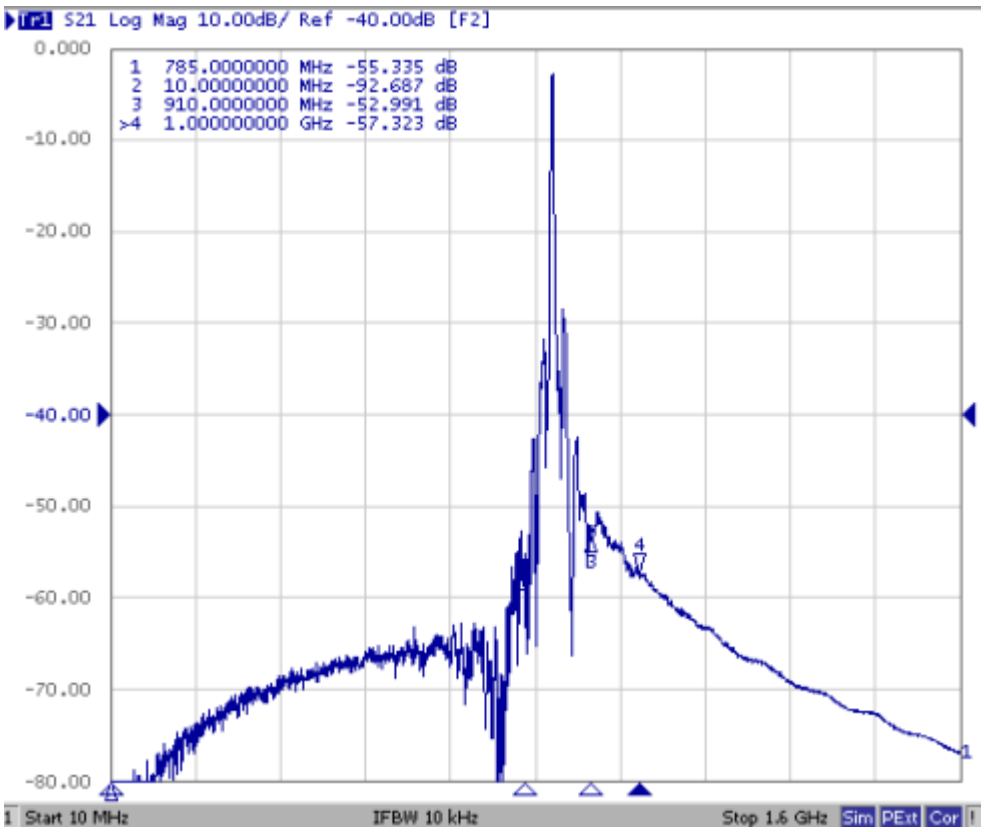
Item		Unit	Min.	Typ.	Max.
Center frequency	**Fc**	MHz	-	836.5	-
Minimum insertion loss	**IL(min)**				
Exclude loss in matching elements *1)		dB	-	2.6	3.8
Incl. loss of matching elements(Q=91) *2)		dB	-	3.0	4.2
Passband (relative to IL$_{min}$) *1)					
835.50 ~ 837.50 MHz		dB	-	1.0	3.0
3dB bandwidth		MHz	-	4.5	-
Attenuation (relative to ILmin) *1)					
10.000-785.00	MHz	dB	40	51	-
785.00-810.00	MHz	dB	30	38	-
810.00-829.00	MHz	dB	20	29	-
843.00-850.00	MHz	dB	15	27	-
850.00-910.00	MHz	dB	18	25	-
910.00-1000.0	MHz	dB	40	48	-
Impedance at Fc, Input *1) **Zin = Rin//Cin**	Zs	Ω		651Ω//1.5pF	
Impedance at Fc, Output *1) **Zout = Rout//Cout**	Z_L	Ω		598Ω//1.5pF	

*1)： The matching circuit is ideal by simluation.
*2)： The matching circuit is real by actual passive components.
0805 Coillcraft CS series chip conductor is used for inductor.
0402 muRata GRM series is used for capacitor.

C. FREQUENCY CHARACTERISTICS：

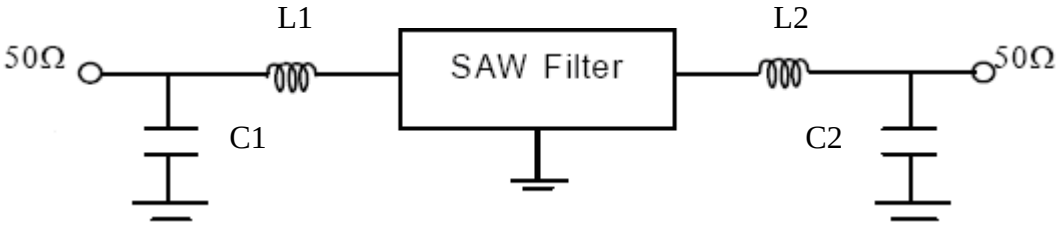





S21 Log Mag 10.00dB/ Ref -40.00dB [F2]
1 785.0000000 MHz -55.335 dB
2 10.00000000 MHz -92.687 dB
3 910.0000000 MHz -52.991 dB
>4 1.000000000 GHz -57.323 dB
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
Start 10 MHz
IFBW 10 kHz
Stop 1.6 GHz
Sim
PExt
Cor

D. MEASUREMENT CIRCUIT:

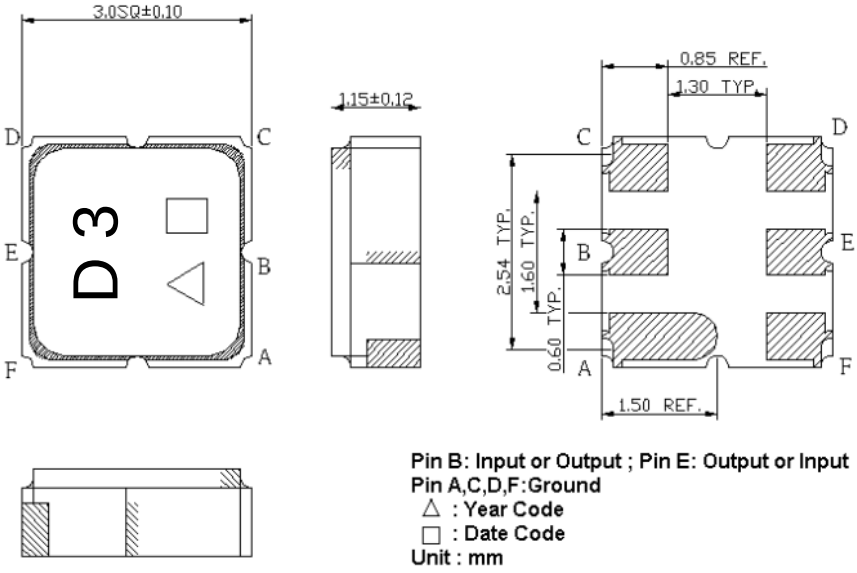
The matching circuit is ideal by simulation



L1：28nH，L2：27nH(Ideal value)

C1：4pF，C2：4pF(Ideal value)

E.OUTLINE DRAWING:

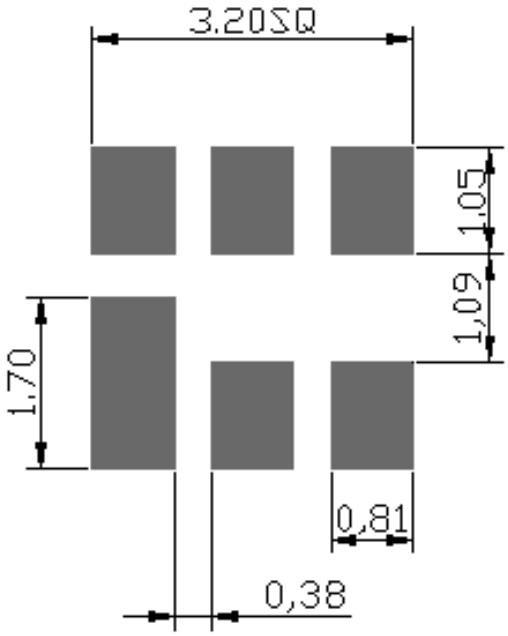


Product / Year Code:2010→0, 2011→1, … 2019→9, 2020→0 …

Date Code Table

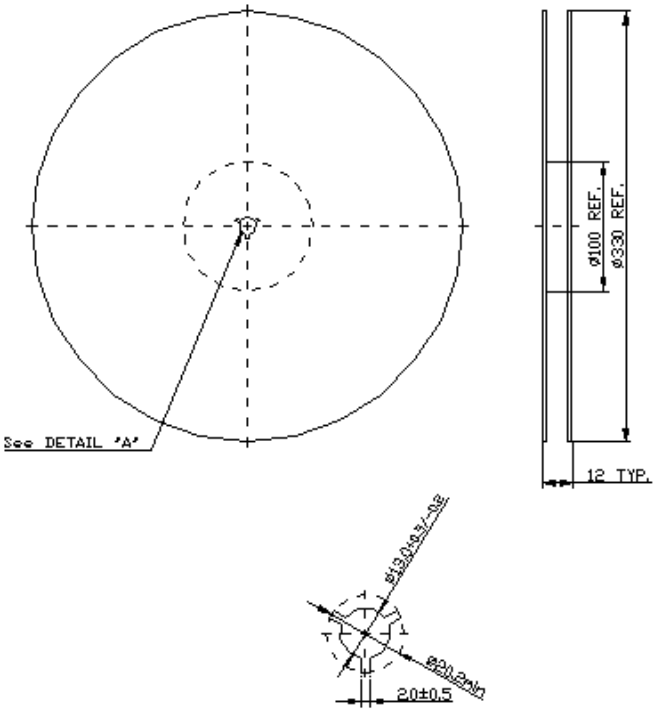
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	**WK15**	**WK16**	**WK17**	**WK18**	**WK19**	**WK20**	**WK21**	**WK22**	**WK23**	**WK24**	**WK25**	**WK26**
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	**WK28**	**WK29**	**WK30**	**WK31**	**WK32**	**WK33**	**WK34**	**WK35**	**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. PCB FOOTPRINT:

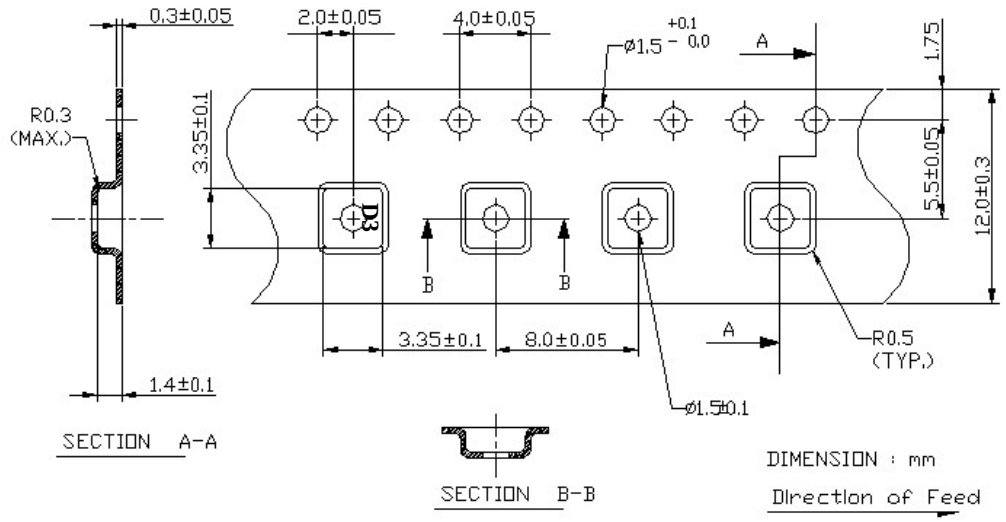


G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :