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: SAW Filter 763 MHz Band14 Rx SMD 1.1X0.9 mm (BW=10 MHz)

TST Part No.: TA2509B(This part is compliant with AEC-Q200)

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____Anne Chen_____

Approved by:_____Andy Yu_____

Date:_____2020/05/19_____

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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SAW Filter MHz 763MHz 10 MHz BW SMD1.1x0.9mm

MODEL NO.:TA2509B REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC Voltage : 5V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +100℃
5. Moisture Sensitivity Level: Level 3
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant

Lead-free soldering

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

B. ELECTRICAL CHARACTERISTICS:

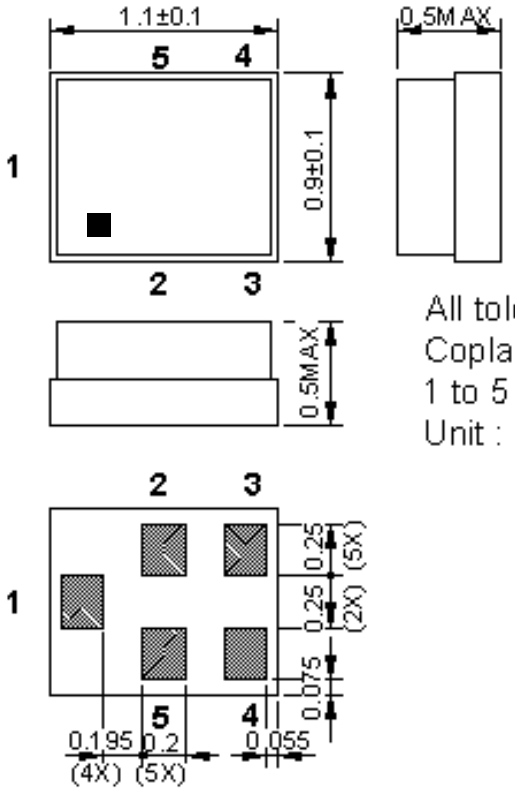
Terminating source impedance(**Unbalanced**) (1) : Zs = 50 Ω

Terminating load impedance(**Unbalanced**) (1) : Z_L = 50 Ω

Item		Unit	Min.	Typ.	Max.	Note
Center Frequency	**Fc**	MHz	-	763	-	-
Insertion Loss (758~768 MHz)	**IL**	dB	-	2.2	3.2	(*1)
Amplitude ripple(758~768 MHz)		dBp-p	-	0.7	2.0	-
VSWR (758~768 MHz)			-	1.8	2.1	-
Attenuation (reference level from 0 dB)						
50~ 698 MHz		dB	30	42	-	-
698 ~ 716 MHz		dB	35	49		
788 ~ 798 MHz		dB	44	49	-	Tx
2400 ~ 2500 MHz		dB	35	42	-	-
4900 ~ 6000 MHz		dB	30	37	-	-

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

C.OUTLINE DRAWING:

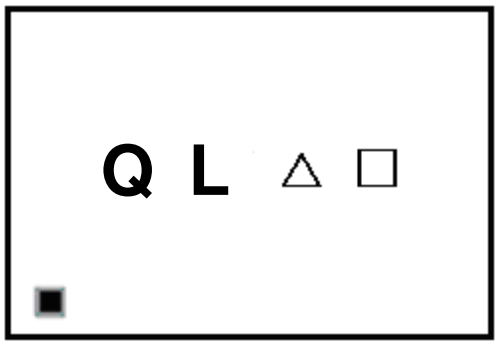


All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

Pin assignment

Pin No.	Pin name	Description
1	In	Input
2	GND	Ground
3	GND	Ground
4	Out	Output
5	GND	Ground

Top View (Mass Production):



Marking name : QL

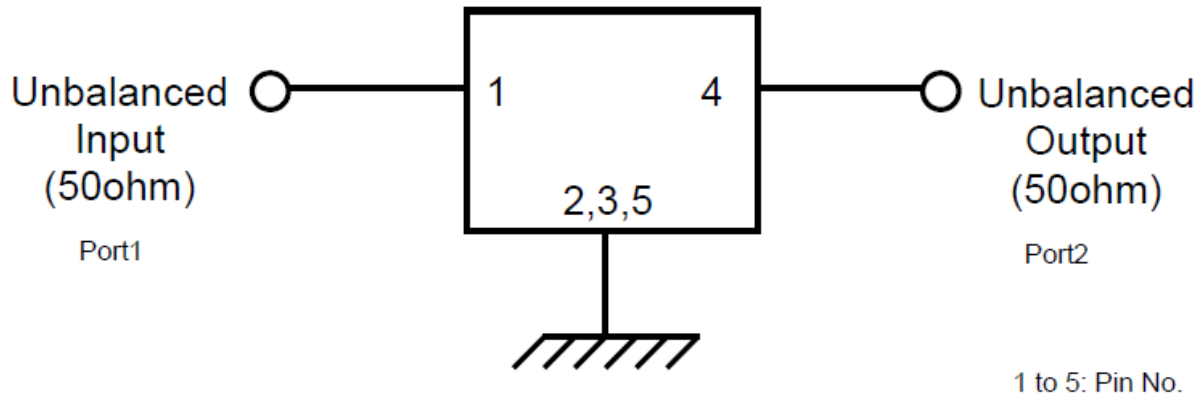
△ : Date Code

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

date Code: (4-year cycle)

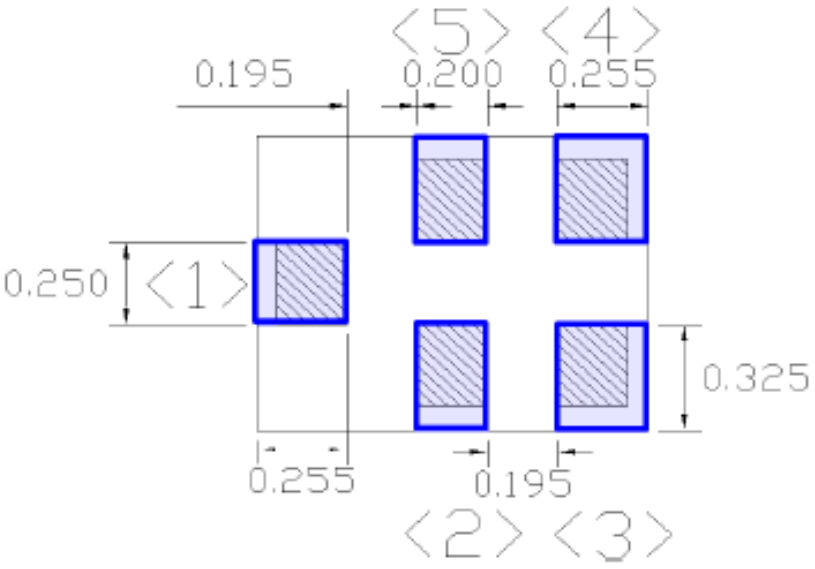
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017 / 2021	A	B	C	D	E	F	G	H	J	K	L	M
2018 / 2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z

D.Evaluation Circuit：



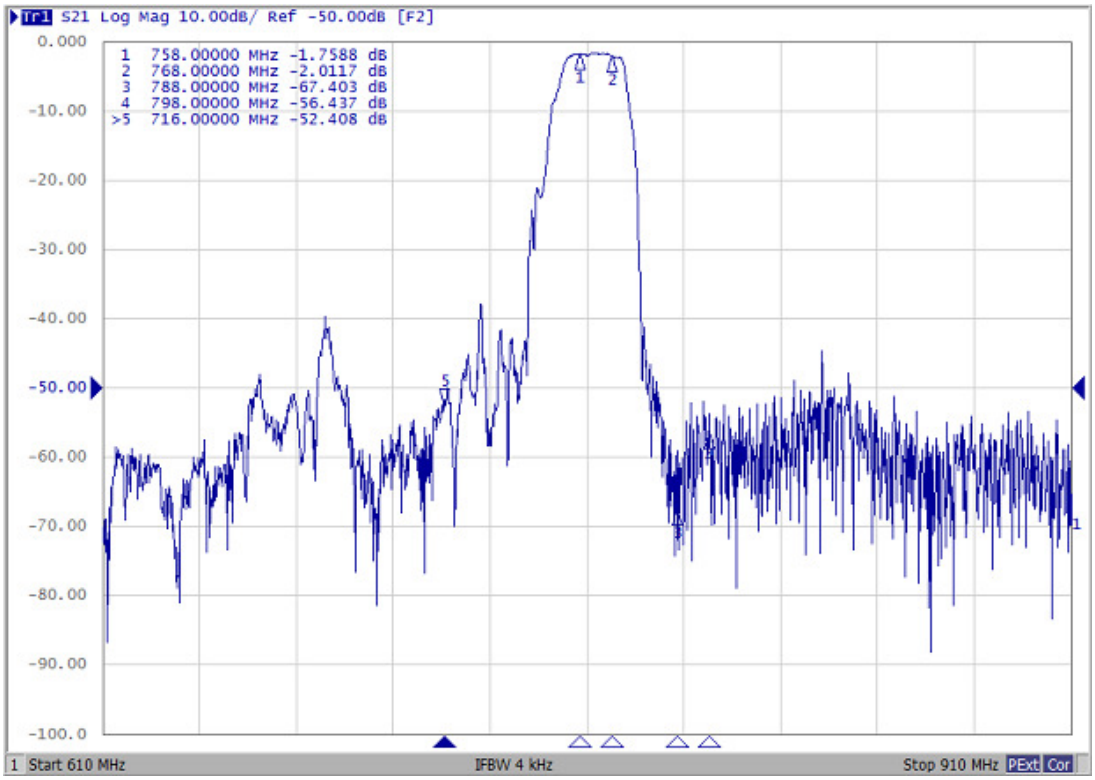
Source & Load Impedance: 50 Ω

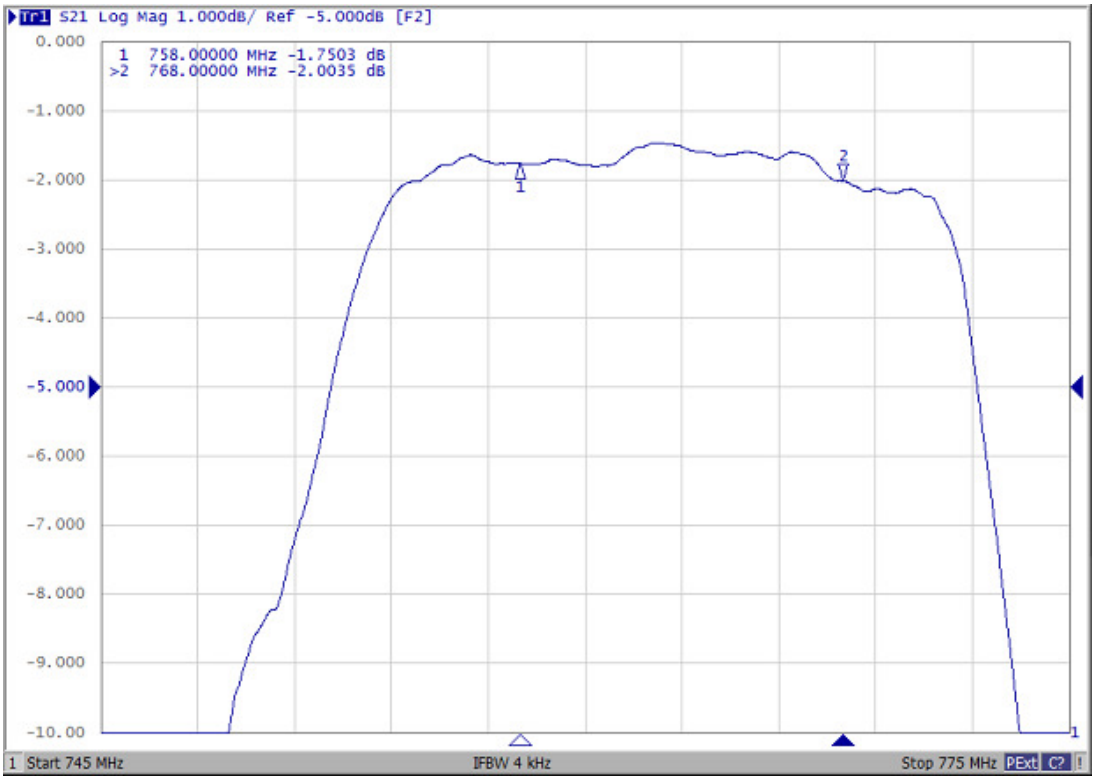
E. PCB Footprint：

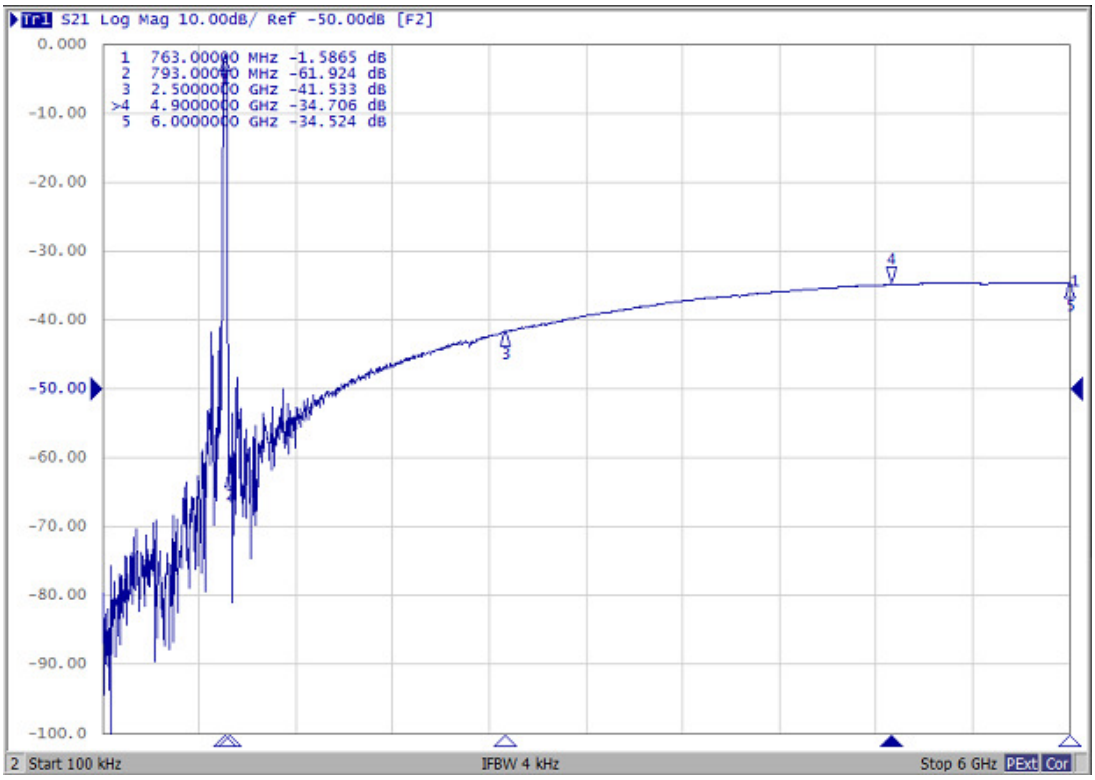


F. Frequency Characteristics

Passband

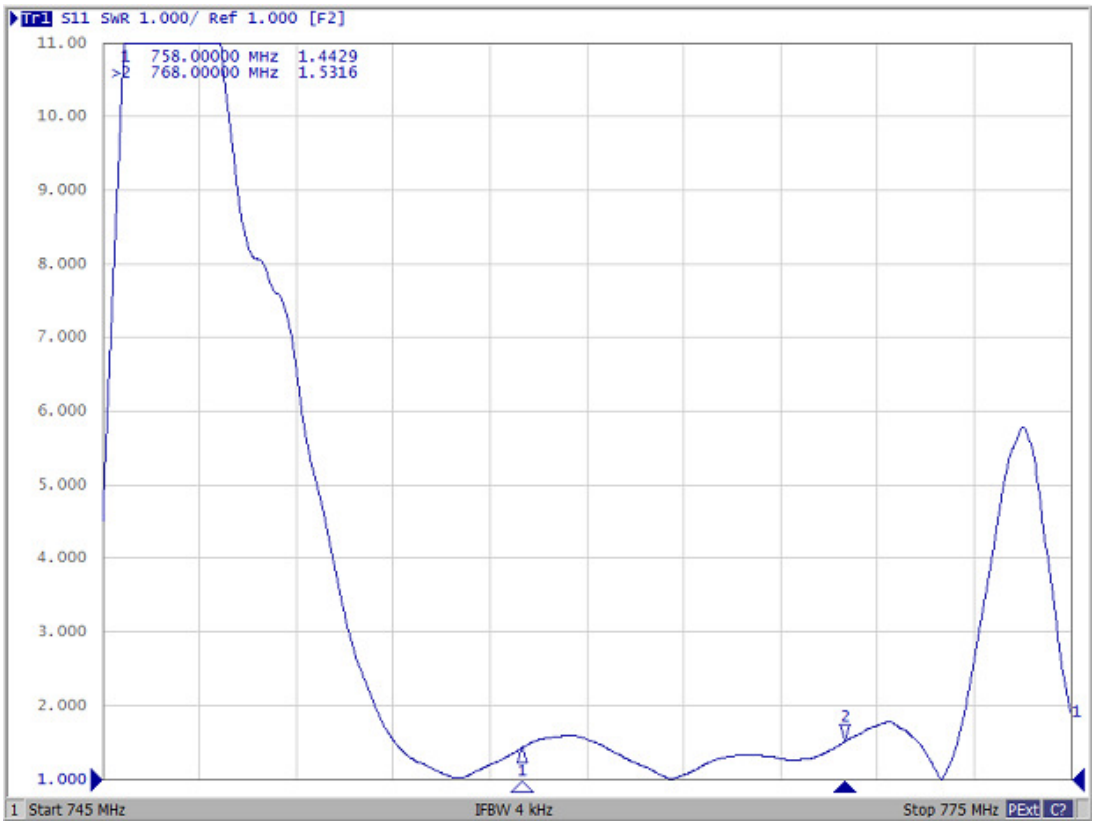




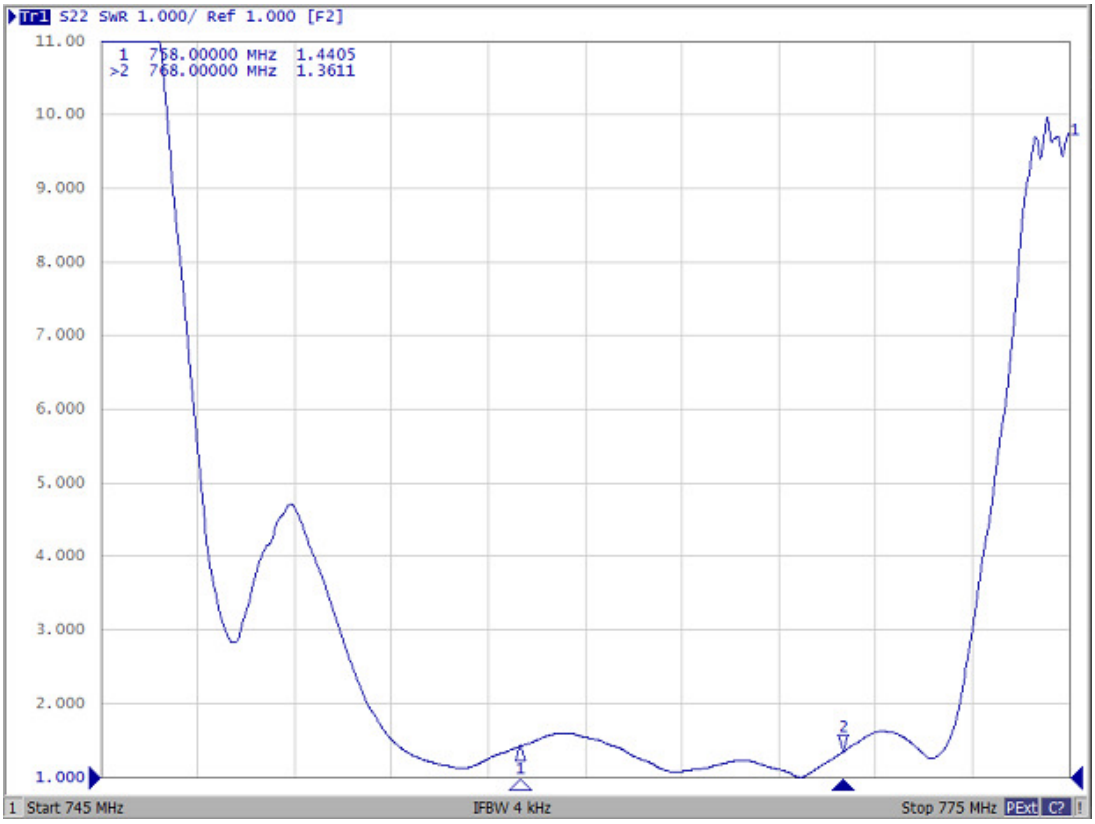

Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]
1 763.0000000 MHz -1.5865 dB
2 793.0000000 MHz -61.924 dB
3 2.5000000 GHz -41.533 dB
>4 4.9000000 GHz -34.706 dB
5 6.0000000 GHz -34.524 dB
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
2 Start 100 kHz
IFBW 4 kHz
Stop 6 GHz
PExt
Cor

Reflection Functions :

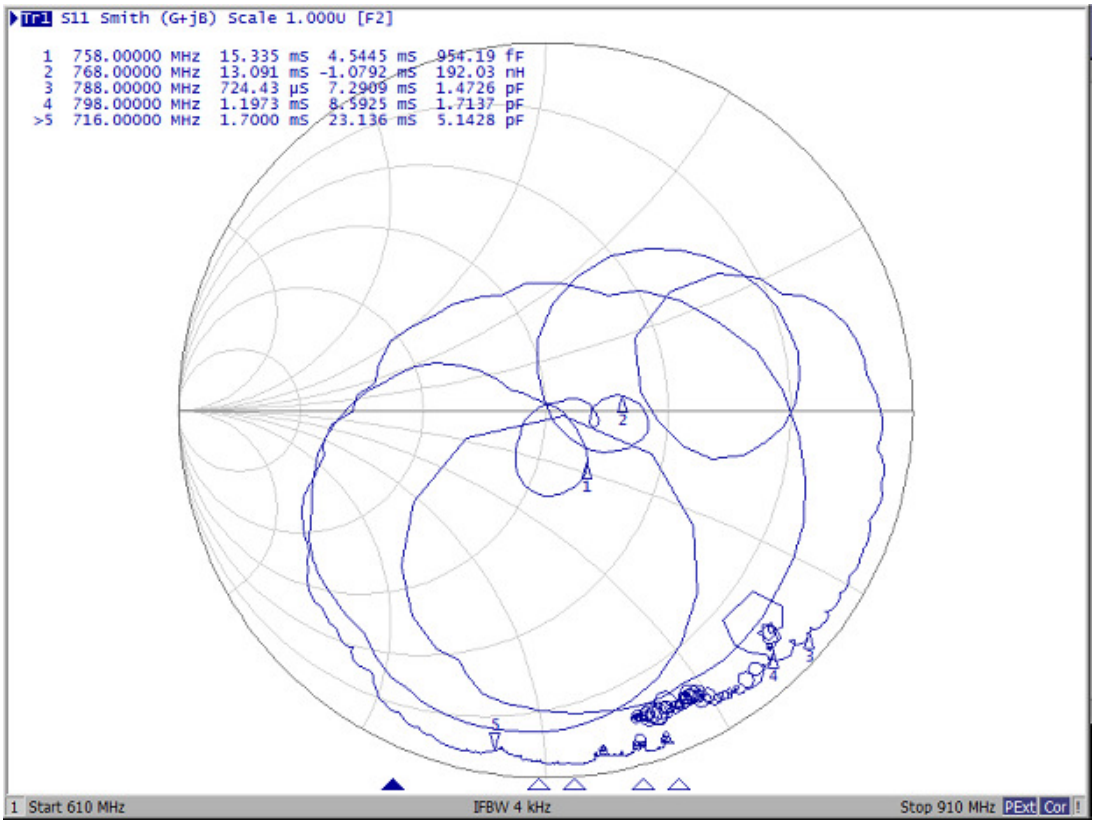
S11 VSWR



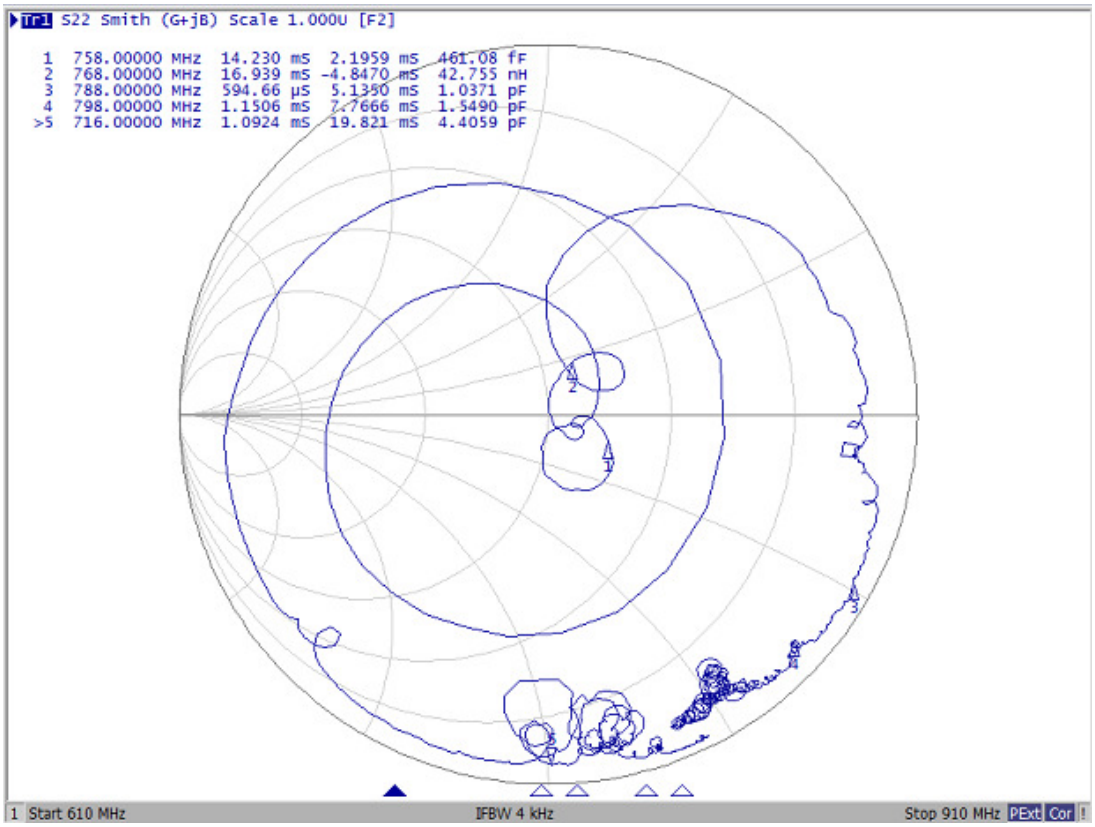
S22 VSWR



S11 Smith Chart



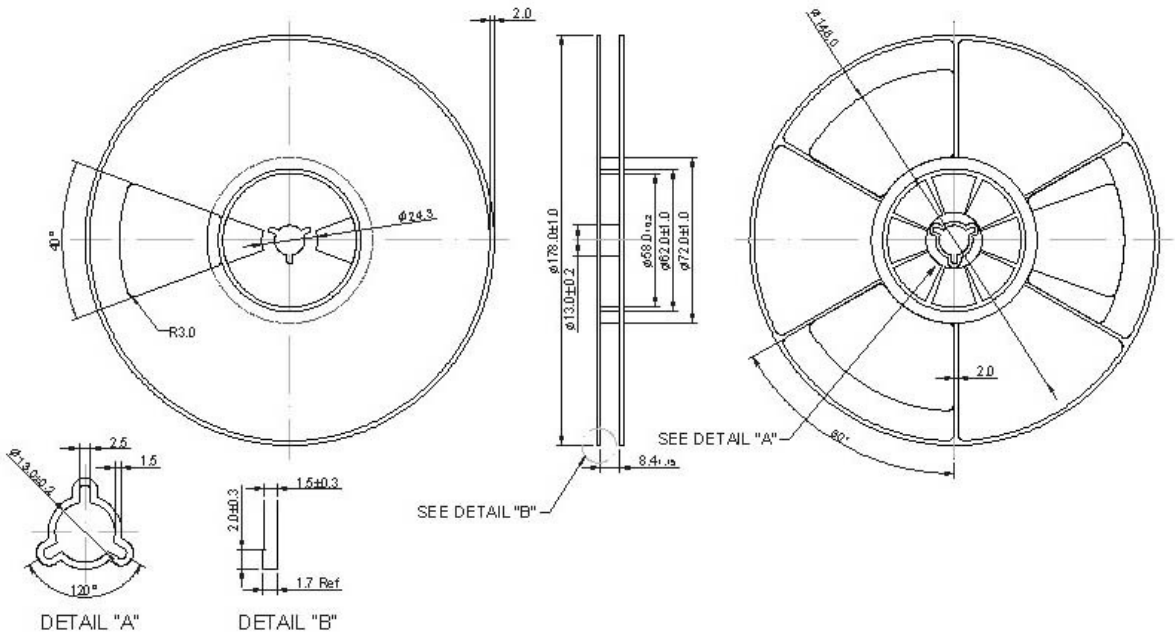
S22 Smith Chart



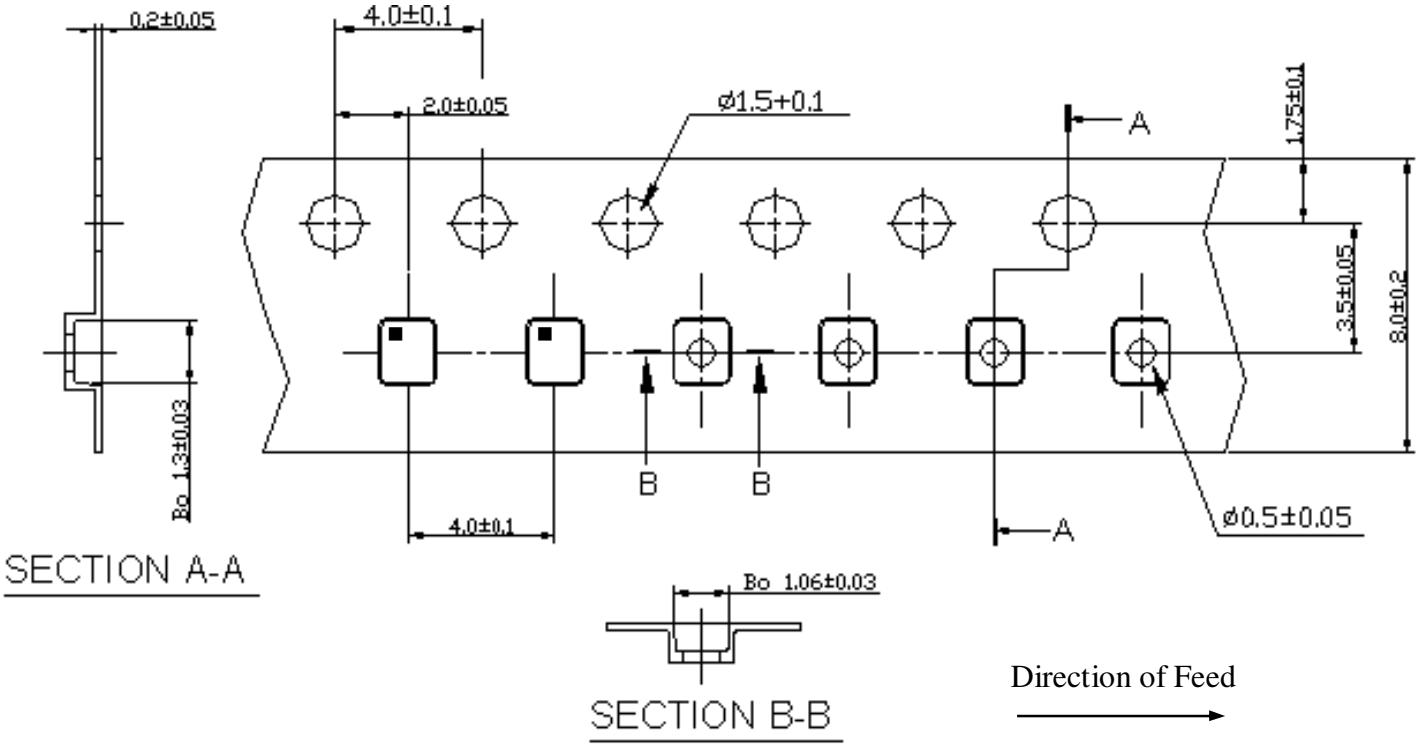
G. PACKING:

1. REEL DIMENSION

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



2.TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :

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.

