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: SAW Filter 1207.5 MHz SMD 1.1X0.9 mm (BW=83MHz)

TST Parts No.: TA2637A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Bob Chau _____

Approval by:_____ Andy Yu _____

Date:_____ 6, 29, 2020 _____

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 1207.5MHz BW25MHz SMD 1.1x0.9mm

MODEL NO.:TA2637A REV. NO.:1.0

A. MAXIMUM RATING:

RoHS Compliant

Lead-free soldering

1. Input Power Level: 13 dBm (5000h)
2. DC Voltage : 3 V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +125℃
5. ESD Machine Mode : 50V
6. ESD Human Body Mode : 100V
7. Moisture Sensitive Level (MSL): Level 3

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

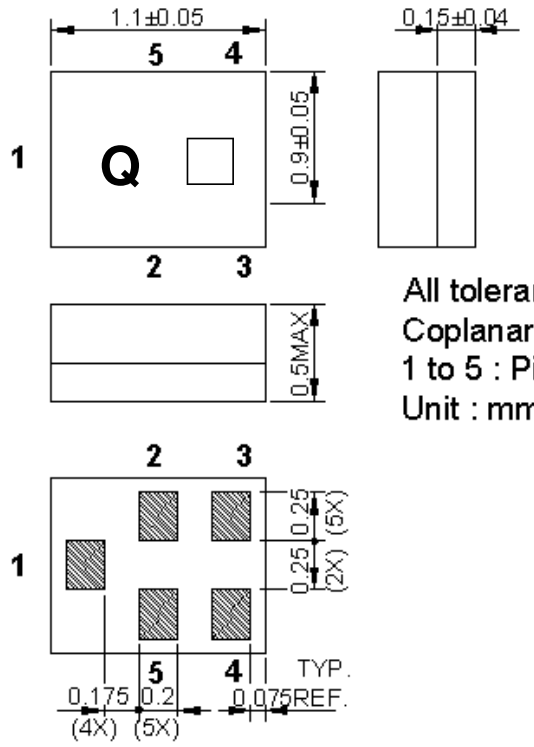
B. ELECTRICAL CHARACTERISTICS:

Temperature range for specification : Tspec = -30℃ to +85℃
Terminating source impedance : Zs = 50 Ω
Terminating load impedance : Z_L = 50 Ω

Item		Unit	Min.	Typ.	Max.
Center Frequency	**Fc**	MHz	-	1207.5	-
Insertion Loss (1166.22~1205.094 MHz)	**IL**	dB	-	2.3	3
Insertion Loss (1205.094~1226.577 MHz)	**IL**	dB	-	1.9	3
Insertion Loss (1226.577~1228.623 MHz)	**IL**	dB	-	1.9	3
Insertion Loss (1228.623~1249.136 MHz)	**IL**	dB	-	2.5	3.5
Amplitude Ripple (1166.22~1205.094 MHz)		dB_{p-p}	-	1	1.8
Amplitude Ripple (1205.094~1226.577 MHz)		dB_{p-p}	-	0.5	1
Amplitude Ripple (1226.577~1228.623 MHz)		dB_{p-p}	-	0.2	1
Amplitude Ripple (1228.623~1249.136 MHz)		dB_{p-p}	-	0.6	1.5
VSWR (1166.22~1249.136 MHz)			-	1.7	2.1
Group Delay Ripple (1166.22~1205.094 MHz)		ns	-	12	30
Group Delay Ripple (1205.094~1226.577 MHz)		ns	-	2	8
Group Delay Ripple (1226.577~1228.623 MHz)		ns	-	1	10
Group Delay Ripple (1228.623~1249.136 MHz)		ns	-	3	20
Attenuation (refer to 0 dB)					
698 ~ 748 MHz		dB	35	41	-
807 ~ 915 MHz		dB	28	32	-

925 ~ 960 MHz	dB	27	31	-
1427 ~ 1463 MHz	dB	25	28	-
1626.5 ~ 1660.5 MHz	dB	28	34	-
1695 ~ 1785 MHz	dB	20	35	-
1850 ~ 2025 MHz	dB	20	33	-
2300 ~ 2690 MHz	dB	27	31	-
3400 ~ 3800 MHz	dB	20	28	-
4400 ~ 4900 MHz	dB	20	25	-
5150 ~ 5925 MHz	dB	20	25	-
Temperature Coefficient	ppm/K	-	-36	-

C.OUTLINE DRAWING:



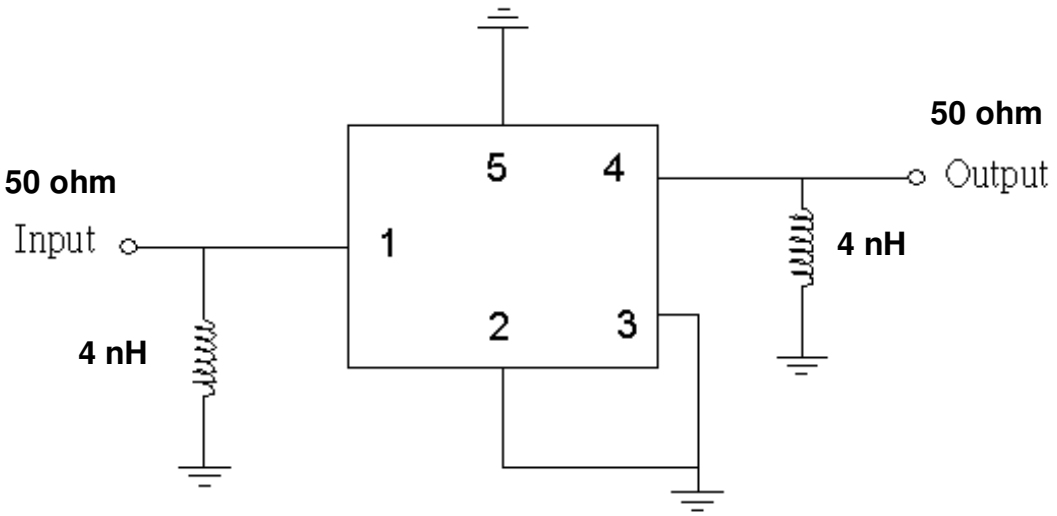
All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

1 : Input
4 : Output
2, 3, 5 : Ground

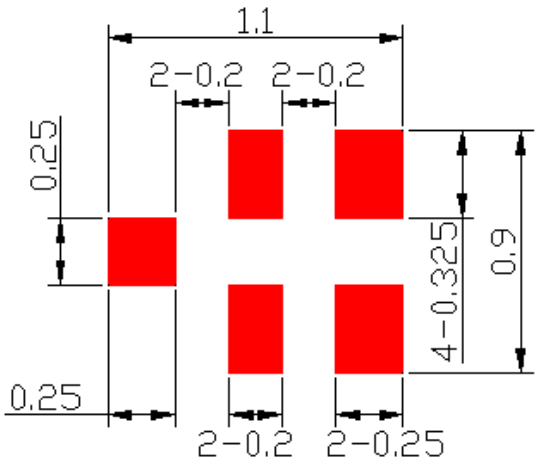
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2014	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2015	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2016	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**
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**

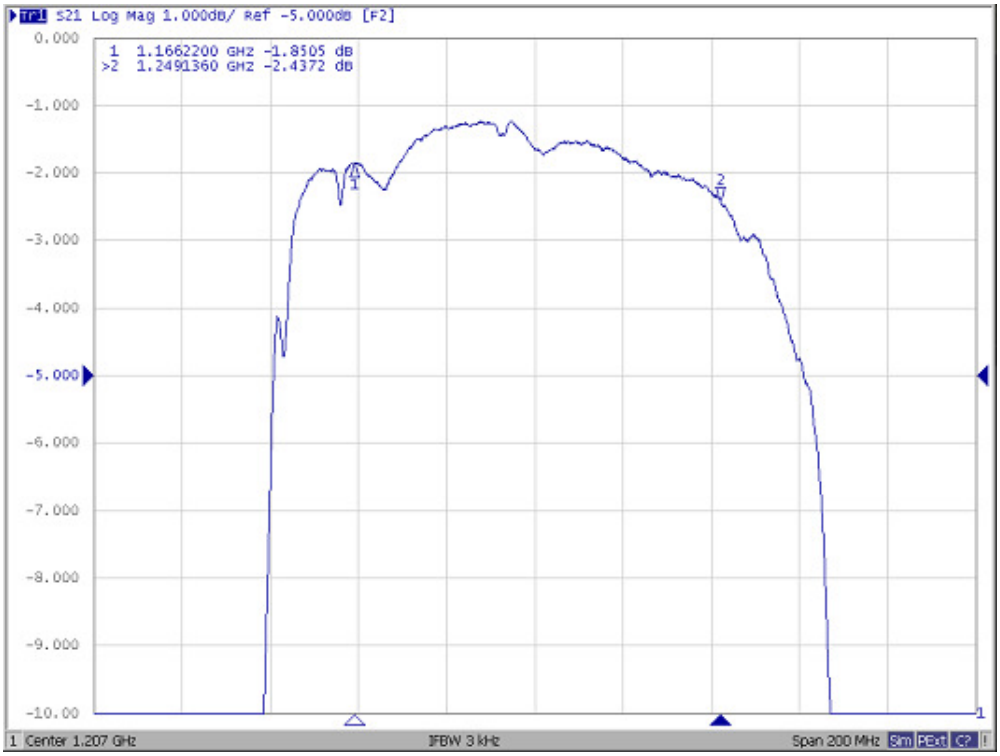
D. MEASUREMENT CIRCUIT:

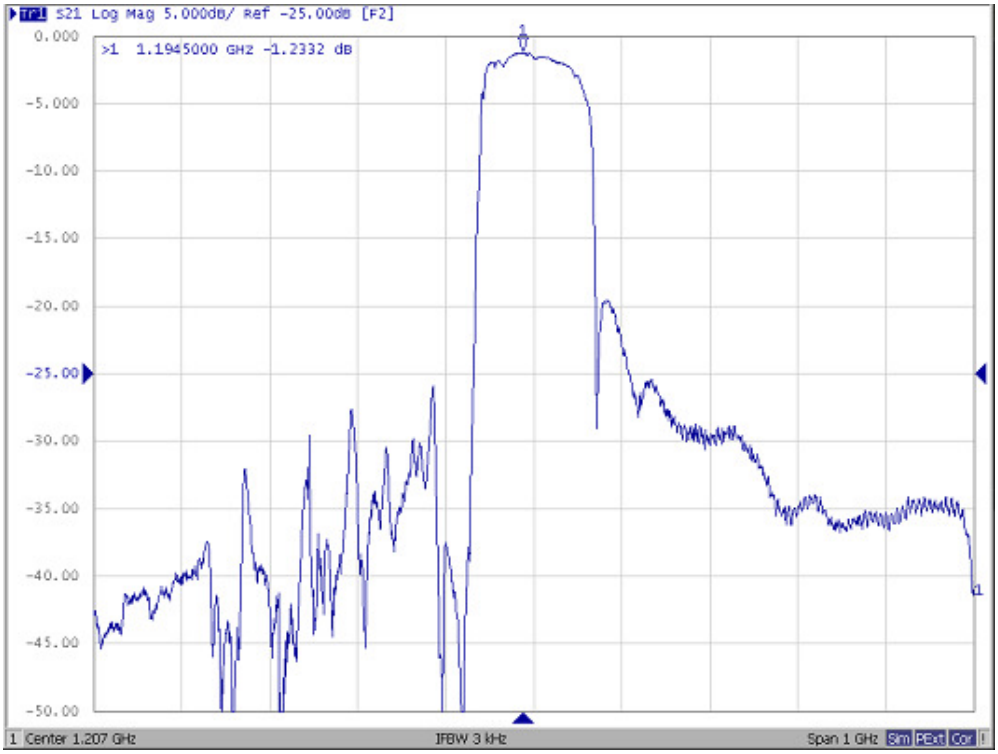


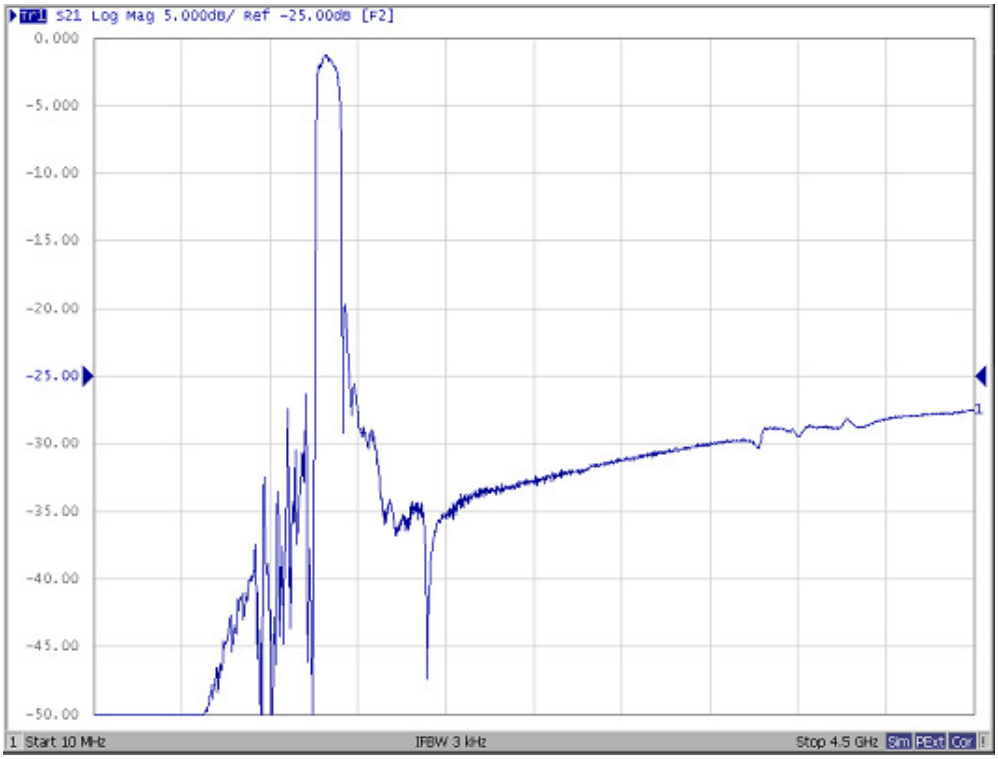
E. PCB Footprint：

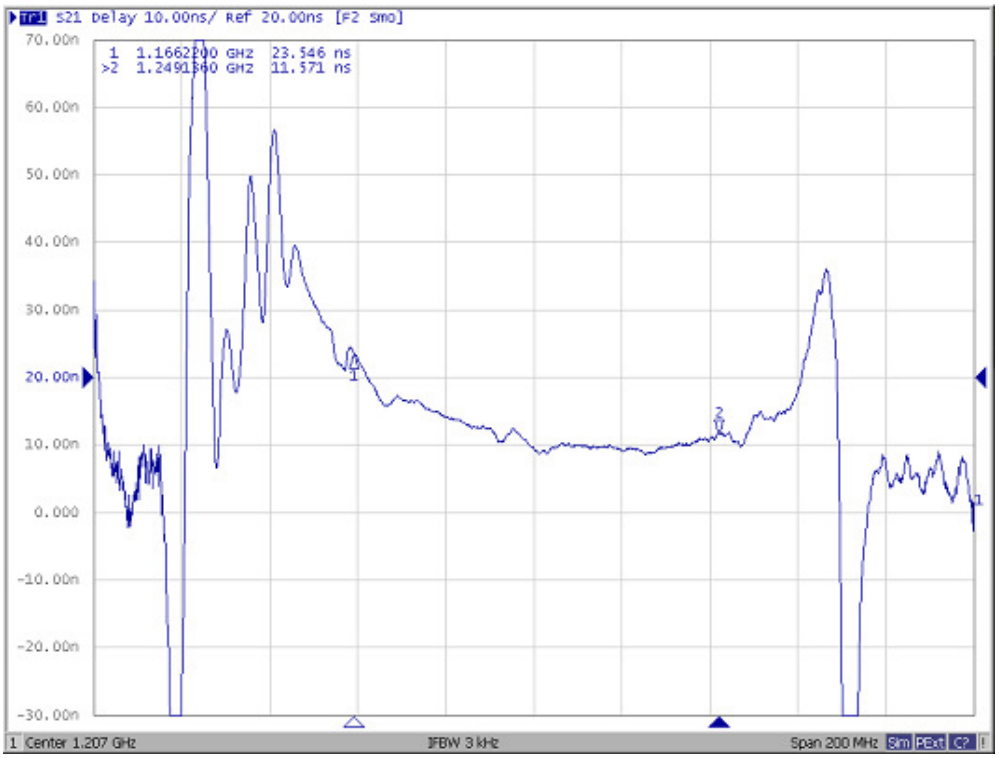


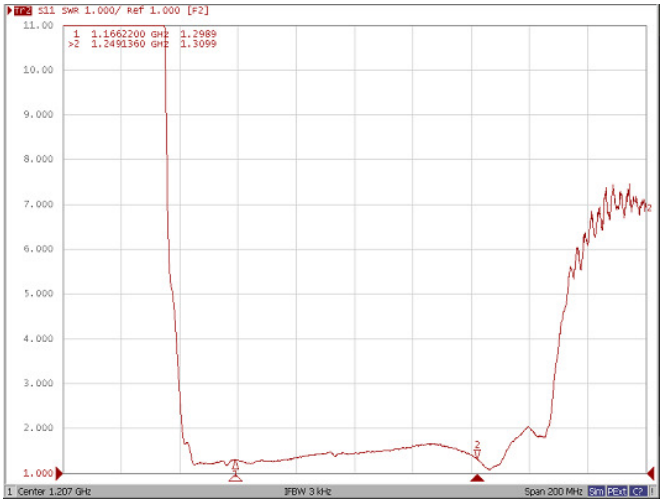
F. Frequency Characteristics:

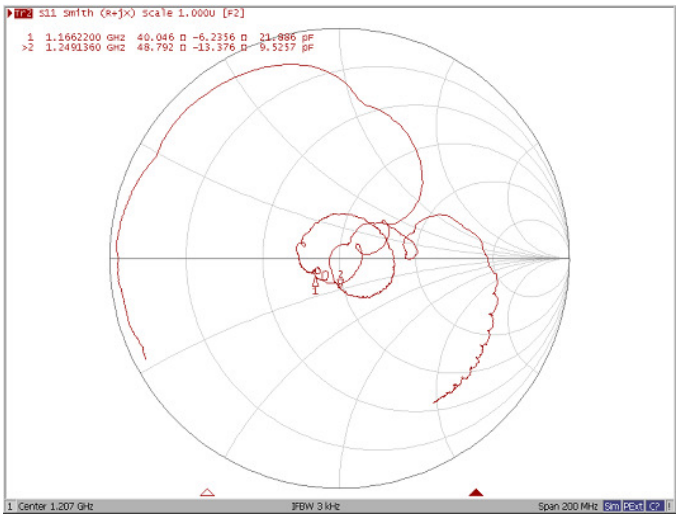


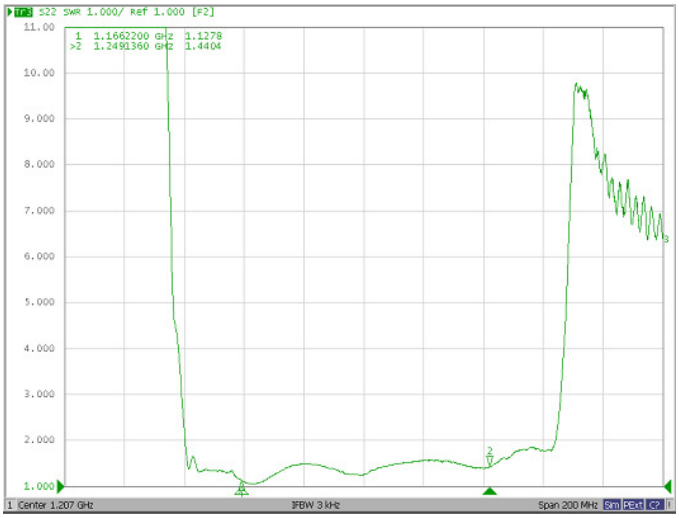


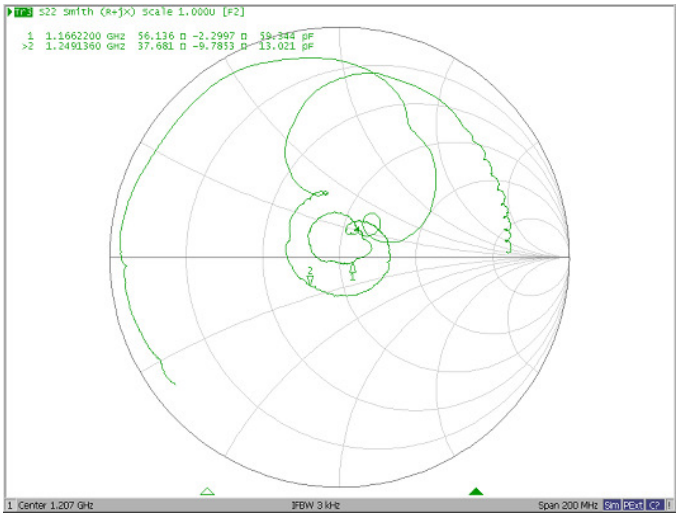

Tr1 S21 Log Mag 5.000dB/ Ref -25.00dB [F2]
0.000
-5.000
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
-45.00
-50.00
1 Start 10 MHz
IFBW 3 kHz
Stop 4.5 GHz
Sm PExt Cor


Tr1 S21 Delay 10.00ns/ Ref 20.00ns [F2 Smo]
1 1.1662200 GHz 23.546 ns
>2 1.2491360 GHz 11.571 ns
70.00n
60.00n
50.00n
40.00n
30.00n
20.00n
10.00n
0.000
-10.00n
-20.00n
-30.00n
1 Center 1.207 GHz
IFBW 3 kHz
Span 200 MHz
Sm PExt C?


S11 SWR 1.000/ Ref 1.000 [F2]
1 1.1662200 GHz 1.2989
>2 1.2491360 GHz 1.3099
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Center 1.207 GHz
IFBW 3 kHz
Span 200 MHz


S11 Smith (R+jX) Scale 1.000U [F2]
1 1.1662200 GHz 40.046 Ω -6.2356 Ω 21.886 pF
>2 1.2491360 GHz 48.792 Ω -13.376 Ω 9.5257 pF
1 Center 1.207 GHz
IFBW 3 kHz
Span 200 MHz

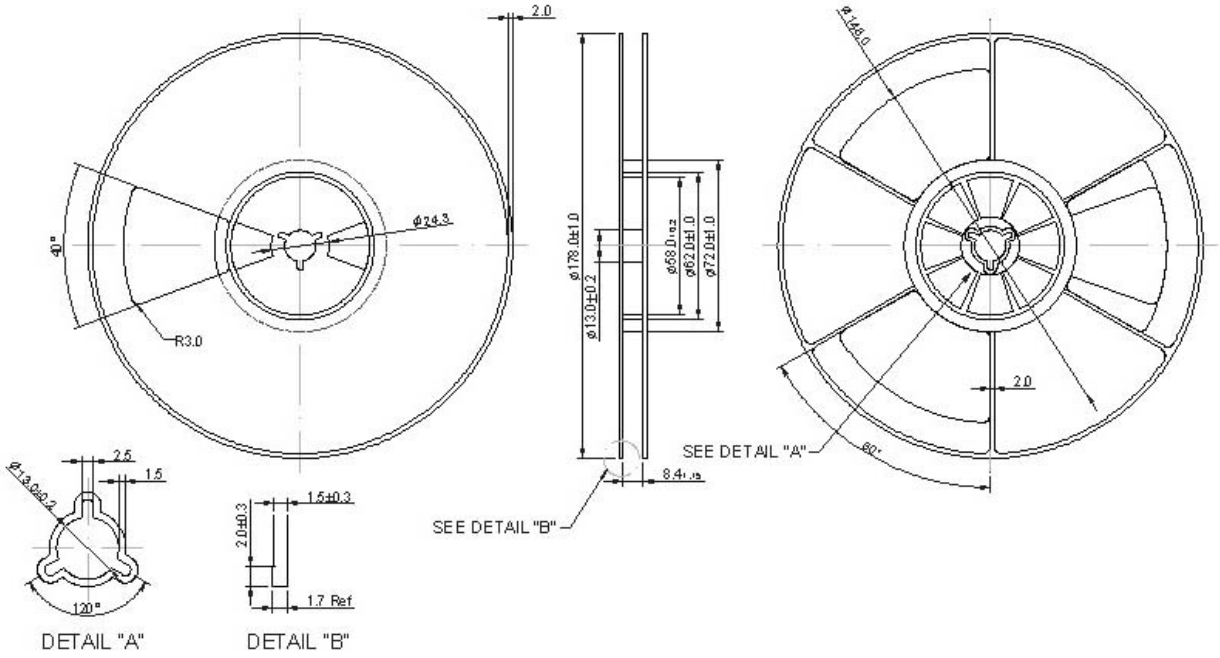

S22 SWR 1.000/ Ref 1.000 [F2]
1 1.1662200 GHz 1.1278
>2 1.2491360 GHz 1.4404
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Center 1.207 GHz
IFBW 3 kHz
Span 200 MHz


S22 Smith (R+jX) Scale 1.000U [F2]
1 1.1662200 GHz 56.136 Ω -2.2997 Ω 59.344 pF
>2 1.2491360 GHz 37.681 Ω -9.7853 Ω 13.021 pF
1 Center 1.207 GHz
IFBW 3 kHz
Span 200 MHz

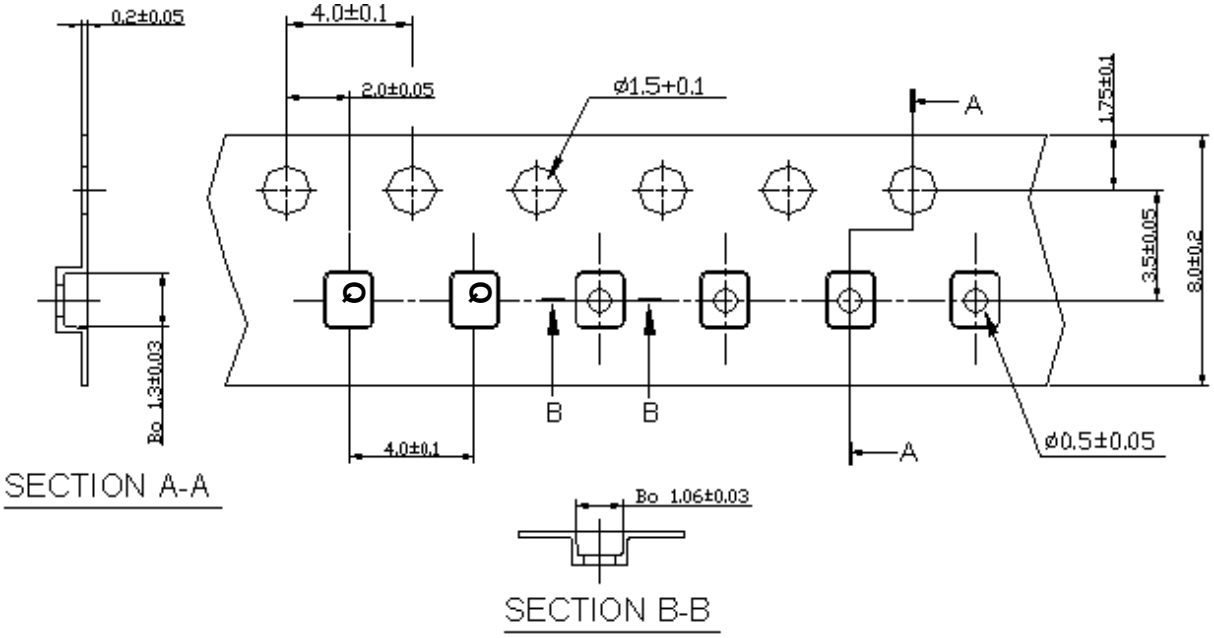
G. PACKING:

1. REEL DIMENSION

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



2.TAPE DIMENSION



Direction of Feed

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.

