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Product Specifications Approval Sheet

Product Description: Band7 Rx Balanced SAW Filter 2655 MHz SMD1.1X0.9 mm

TST Parts No.: TA2130DA

Customer Parts No.: _____

Customer signature required

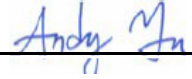
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ V.J Fanchian 

Approval by: _____ Andy Yu 

Date: _____ 06, 28, 2019

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

Band7 Rx Balanced SAW Filter 2655 MHz SMD1.1X0.9 mm (BW=70MHz)

MODEL NO.: TA2130DA

REV. NO.:1.0

A. MAXIMUM RATING:

1. Maximum Input Power: 15 dBm
2. DC voltage: 0 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 3 (MSL 3)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)
B. ELECTRICAL CHARACTERISTICS:

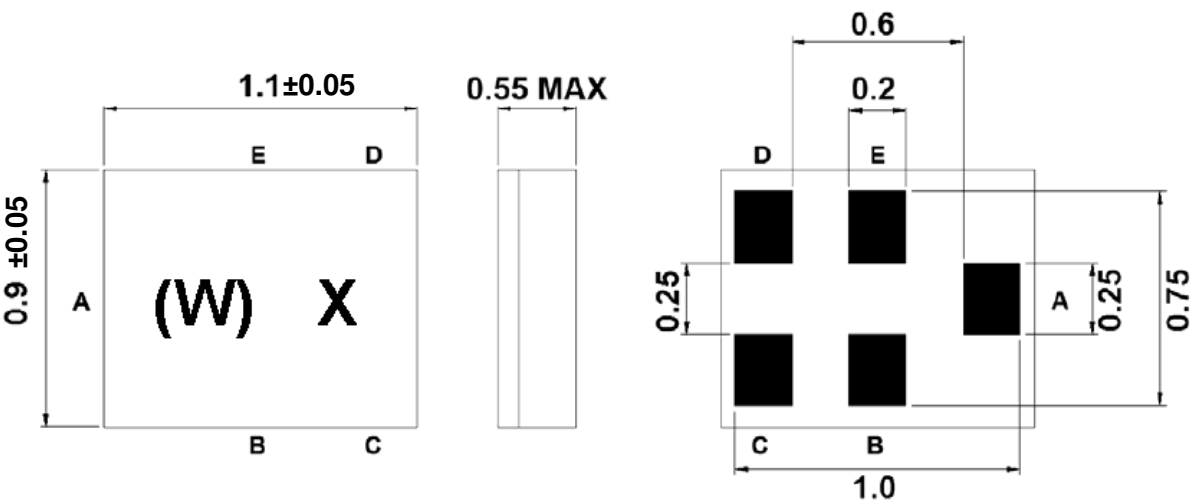
Terminating source impedance: $Z_s = 50\Omega$ (Single)

Terminating load impedance: $Z_L = 100\Omega/22nH$ (Balanced)

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	2655.0	-
Insertion Loss within 2620.0 ~ 2690.0 MHz	dB	-	2.5	3.3
Amplitude Ripple within 2620.0 ~ 2690.0 MHz	dBp -p	-	0.9	1.7
Input VSWR within 2620.0 ~ 2690.0 MHz	-	-	1.8	2.2
Output VSWR within 2620.0 ~ 2690.0 MHz	-	-	1.8	2.2
Amplitude Balance within 2620.0 ~ 2690.0 MHz	dB	-1.6	-0.6/+1.1	+1.6
Phase Balance within 2620.0 ~ 2690.0 MHz	deg	-12	-1.5/+7	+12
Attenuation:				
10.0 ~ 2500.0 MHz	dB	40	46	-
2500.0 ~ 2570.0 MHz	dB	45	49	-
2750.0 ~ 3000.0 MHz	dB	18	24	-
3000.0 ~ 4000.0 MHz	dB	30	43	-
4000.0 ~ 5240.0 MHz	dB	30	43	-
5240.0 ~ 5380.0 MHz	dB	30	44	-
5380.0 ~ 6000.0 MHz	dB	25	43	-

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

C.OUTLINE DRAWING:



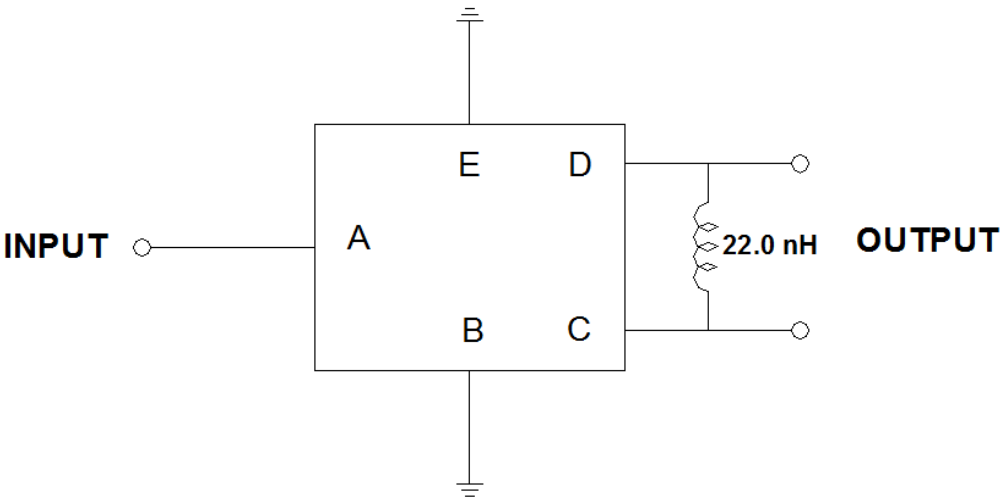
Marking Descriptions	
(W)	Series Number
X	Date Code(Year+Month)

Pin Description	
B, E	Ground
A	Input
C,D	Balanced Output

Dare Code (Year+Month)

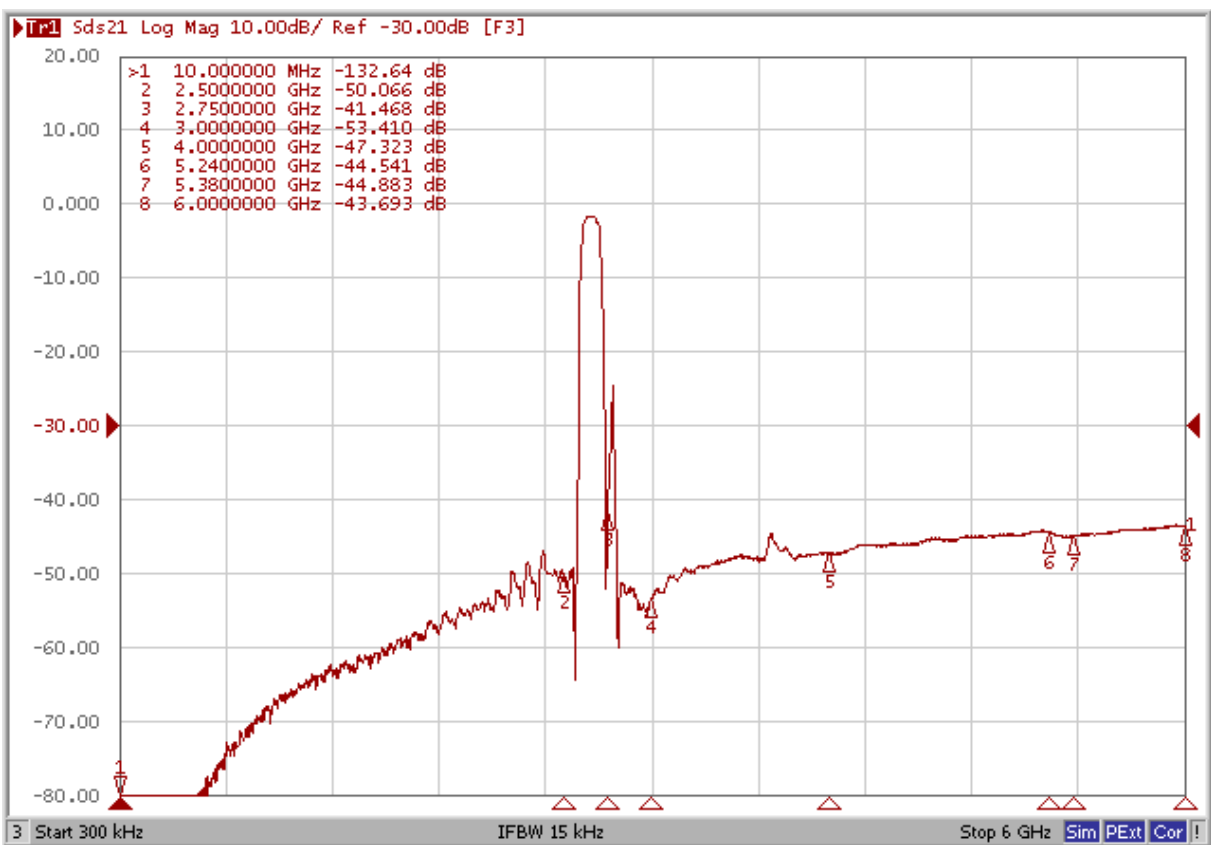
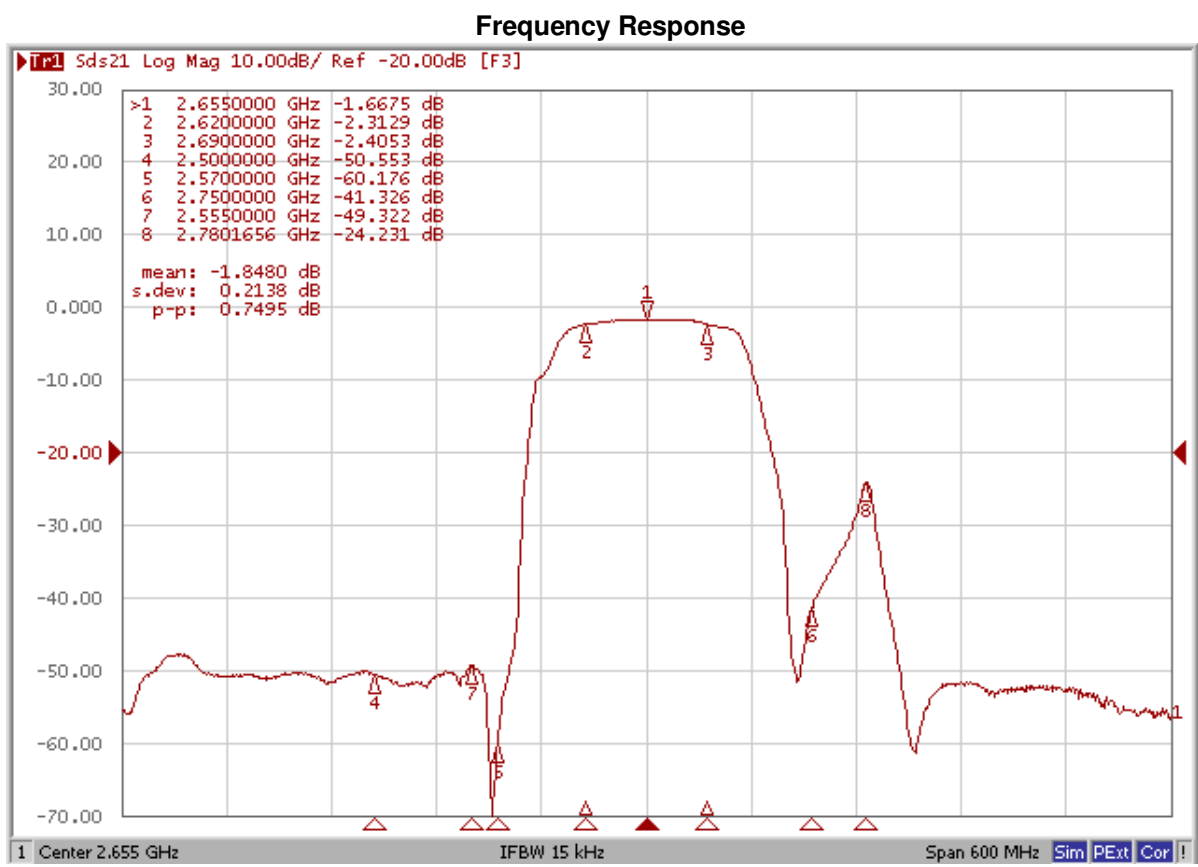
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

D. MEASUREMENT CIRCUIT:



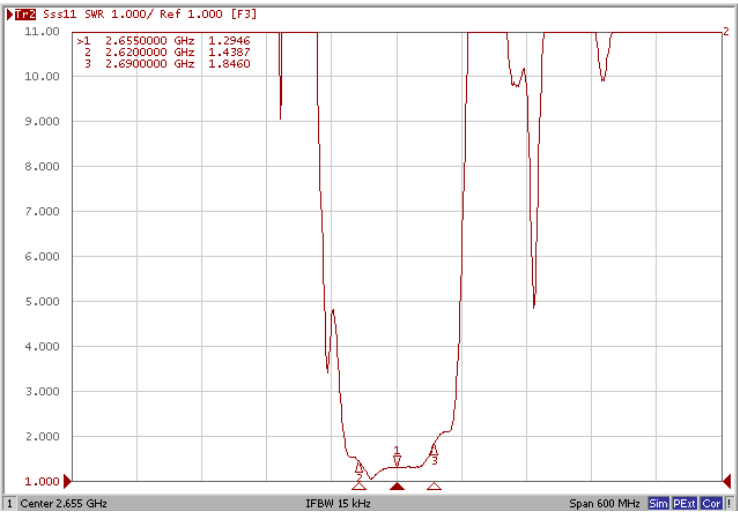
Source Impedance : 50Ω
Load Impedance : 100Ω

E. FREQUENCY CHARACTERISTICS:

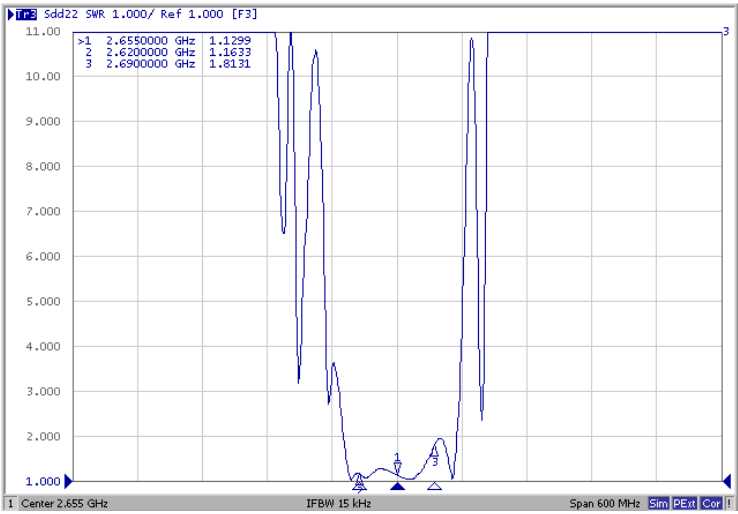


VSWR

S11

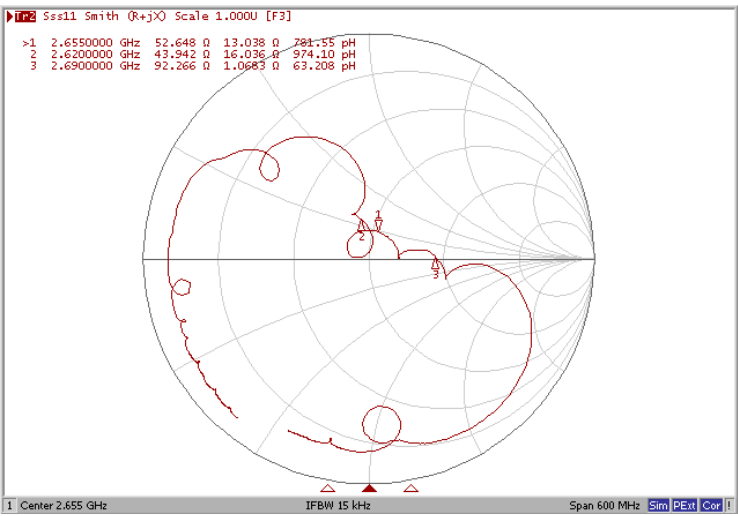


S22

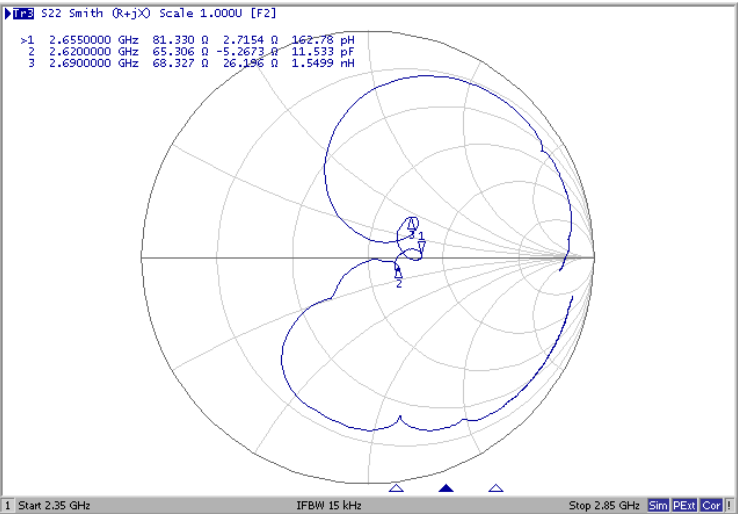


Smith Chart

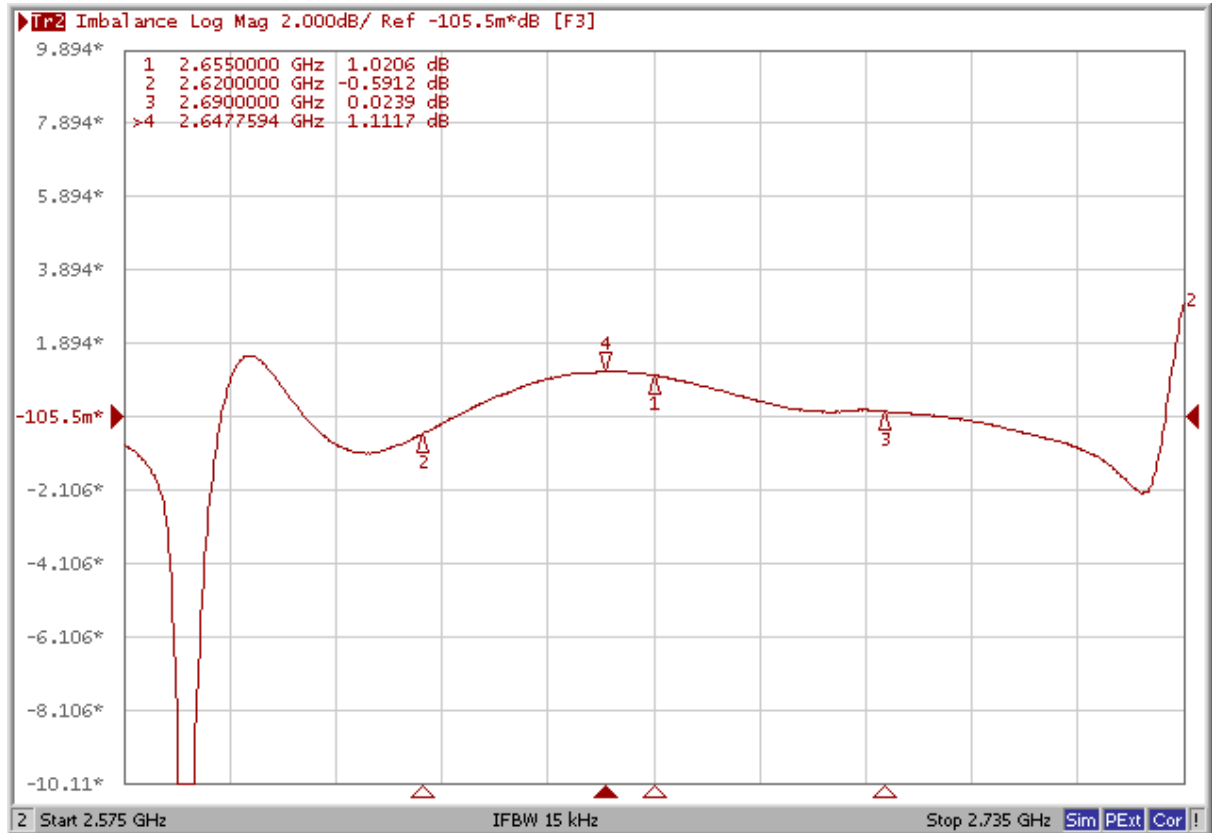
S11



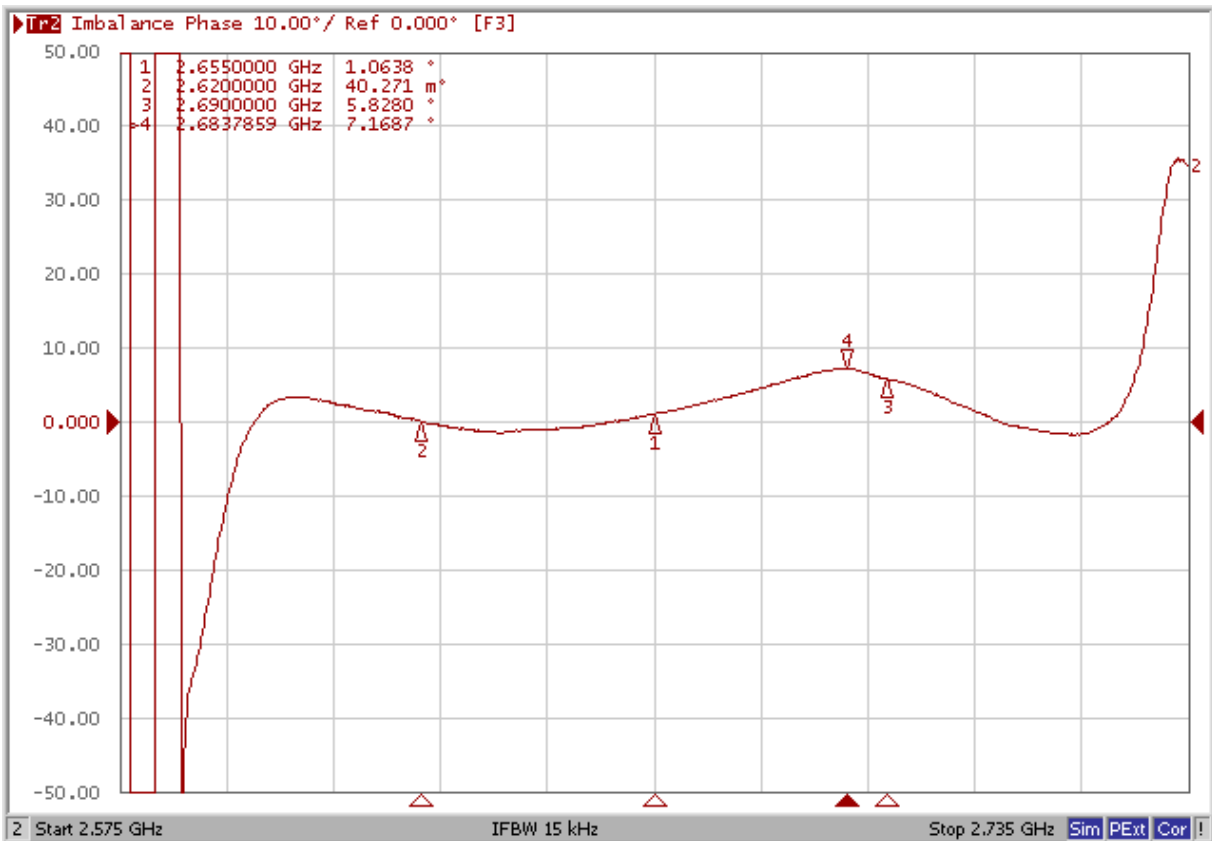
S22



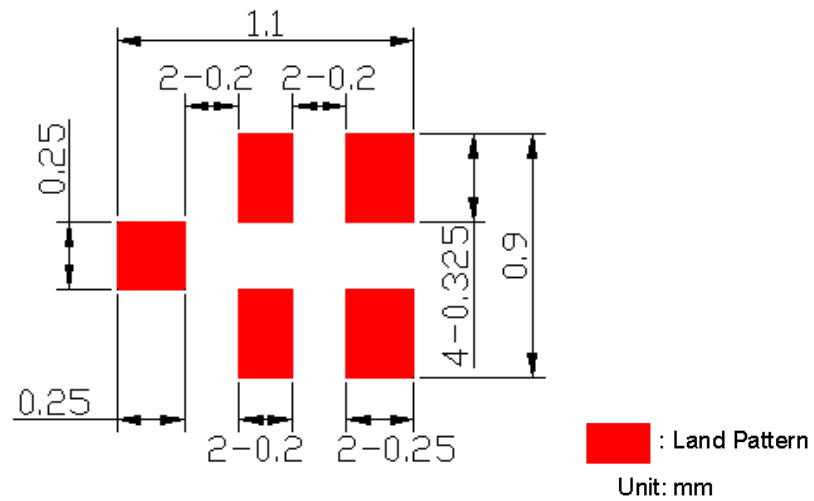
Amplitude balance



Phase balance

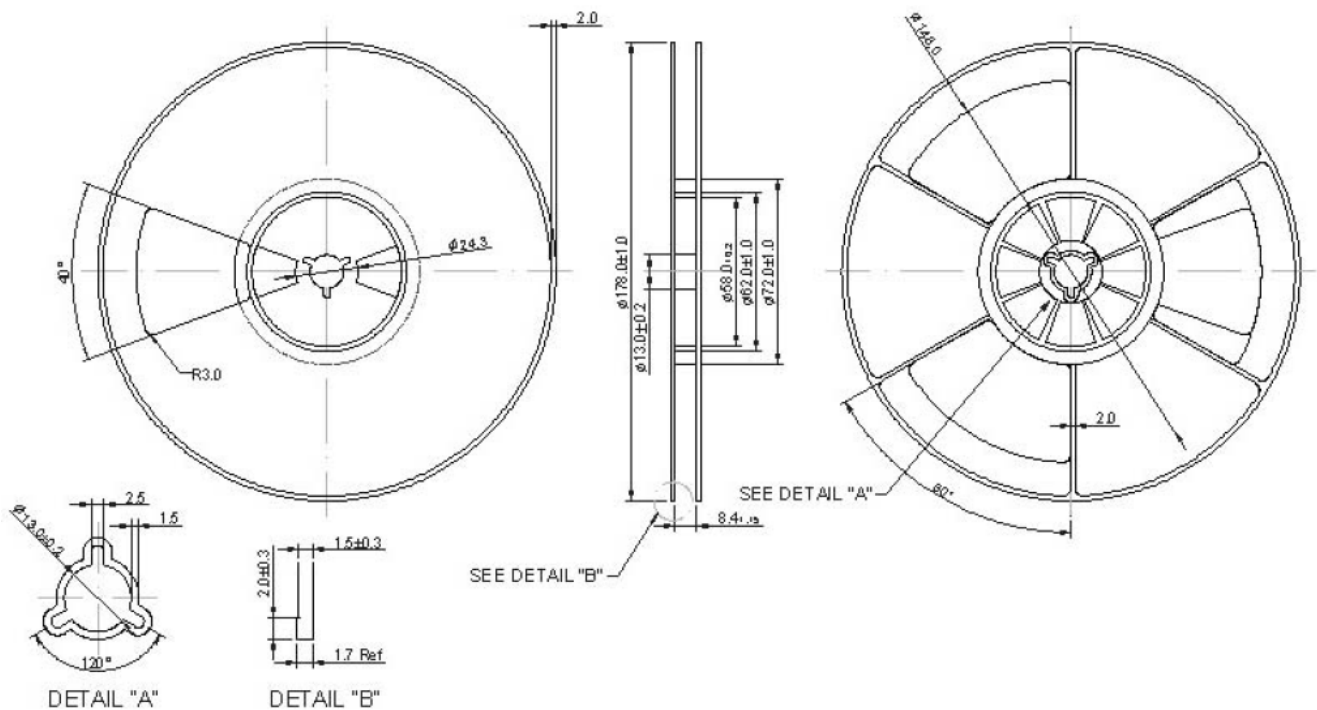


F. PCB Footprint:

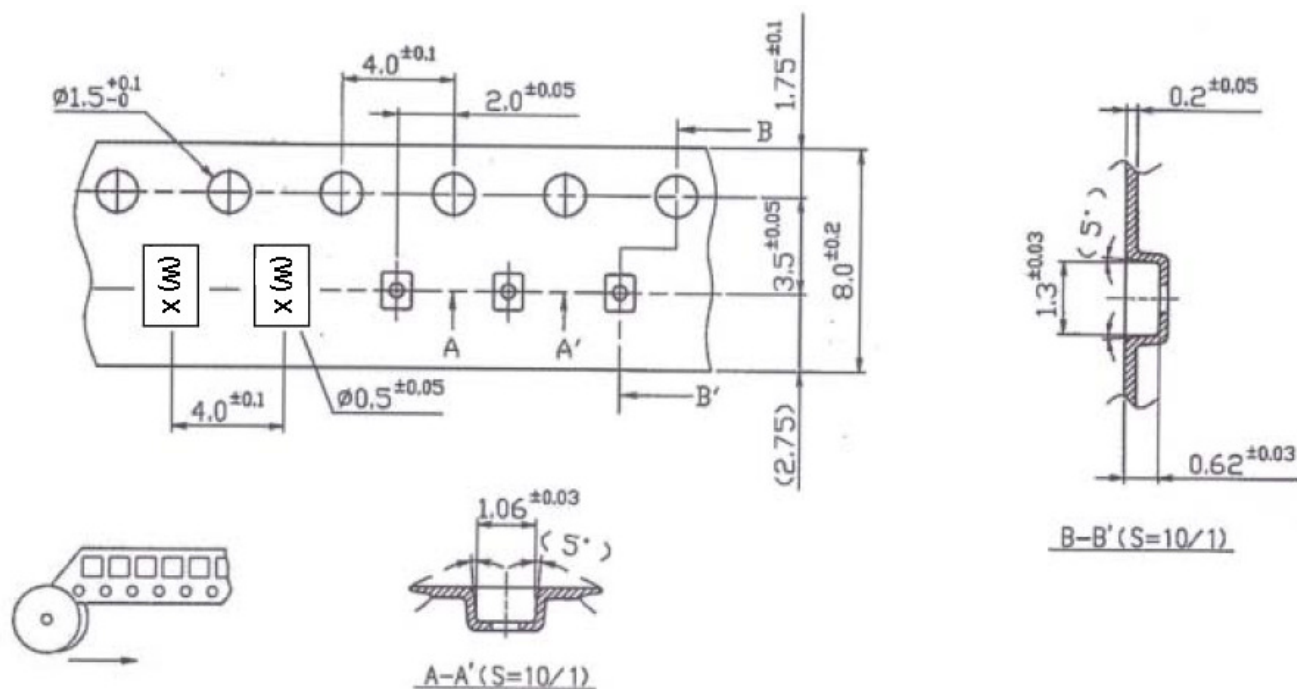


G. PACKING:

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at $150 \sim 180^\circ\text{C}$ 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 $260^\circ\text{C} \pm 0/-5^\circ\text{C}$ peak (20~40sec).
4. Time: 2 times.

