



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

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Product Specifications Approval Sheet

Product Description: SAW Filter 1960 MHz Band 2 Rx SMD 1.1x0.9 mm (BW=60 MHz)

TST Part No.: TA1950A

Customer Part No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2015/12/28

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 1960 MHz Band 2 Rx SMD 1.1x0.9 mm (BW=60 MHz)

MODEL NO.: TA1950A

REV. NO.:1.0

A. MAXIMUM RATING:

1. Operating temperature: -30 °C to +85 °C
2. Storage temperature range: -40 °C to +85 °C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

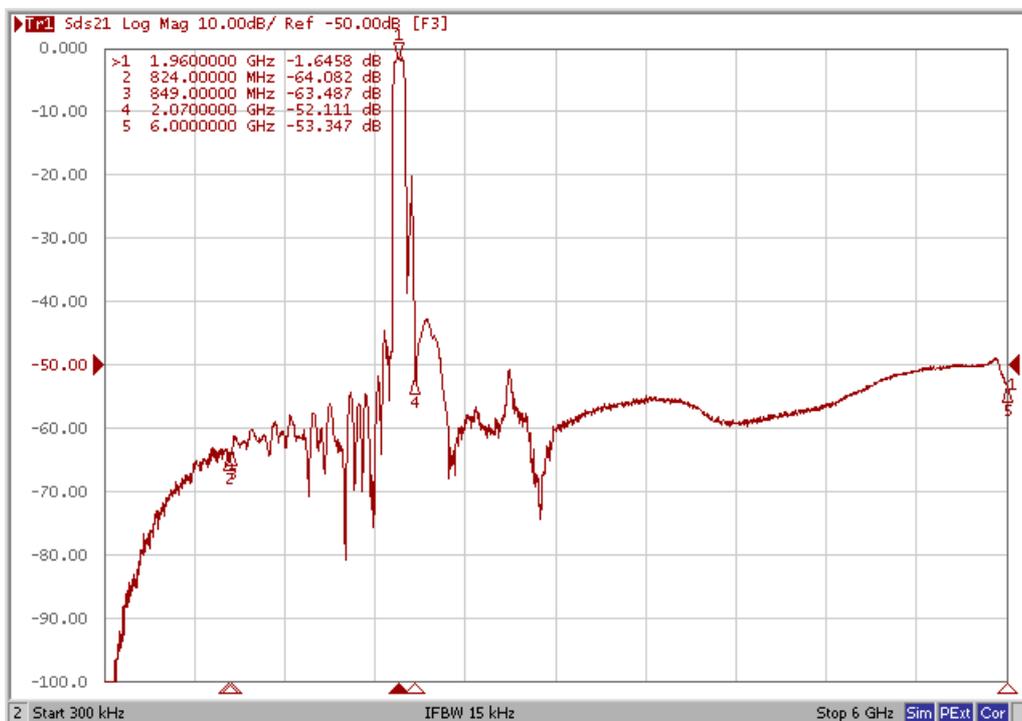
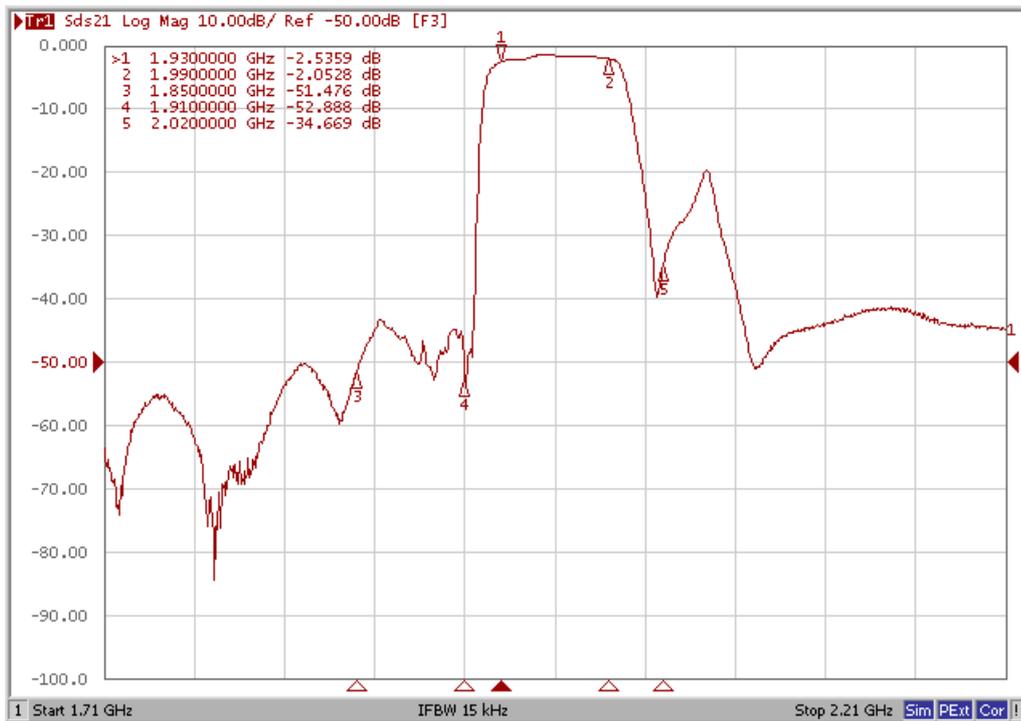
Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 100//27nH \Omega$ (Balanced)

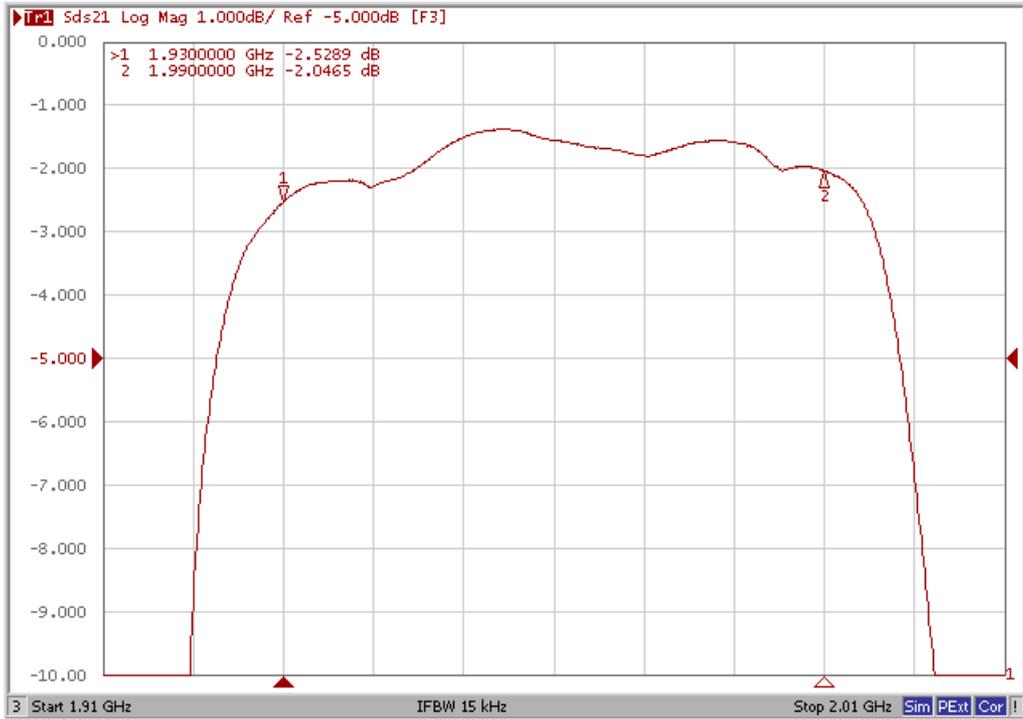
Parameters Description		Unit	Min.	Typ.	Max.	Remarks	
Center Frequency		MHz	-	1960	-	-	
Insertion Loss	1930~1990 MHz	dB	-	2.8	3.7	at 1930.6~1989.4 MHz	
		dB	-	-	4.0	-	
Amplitude Ripple	1930~1990 MHz	dB _{p-p}	-	1.3	2.3	at 1930.6~1989.4 MHz	
		dB _{p-p}	-	-	2.6	-	
VSWR	Input	1930~1990 MHz	-	-	1.8	2.2	-
	Output	1930~1990 MHz	-	-	1.8	2.3	-
Amplitude balance ($ S_{21} / S_{31} $)		dB	-1.8	-1.0~+1.3	+1.8	-	
Phase balance ($(\Phi_{S21}-\Phi_{S31})+180$)		deg.	-15	-10~+5	+15	-	
Attenuation:							
10~1850 MHz		dB	40	51		-	
824~849 MHz		dB	50	62	-	-	
1850~1910 MHz		dB	40	44	-	-	
2020~2070 MHz		dB	15	20	-	-	
2070~6000 MHz		dB	35	42	-	-	

C. FREQUENCY CHARACTERISTICS:

Frequency Response



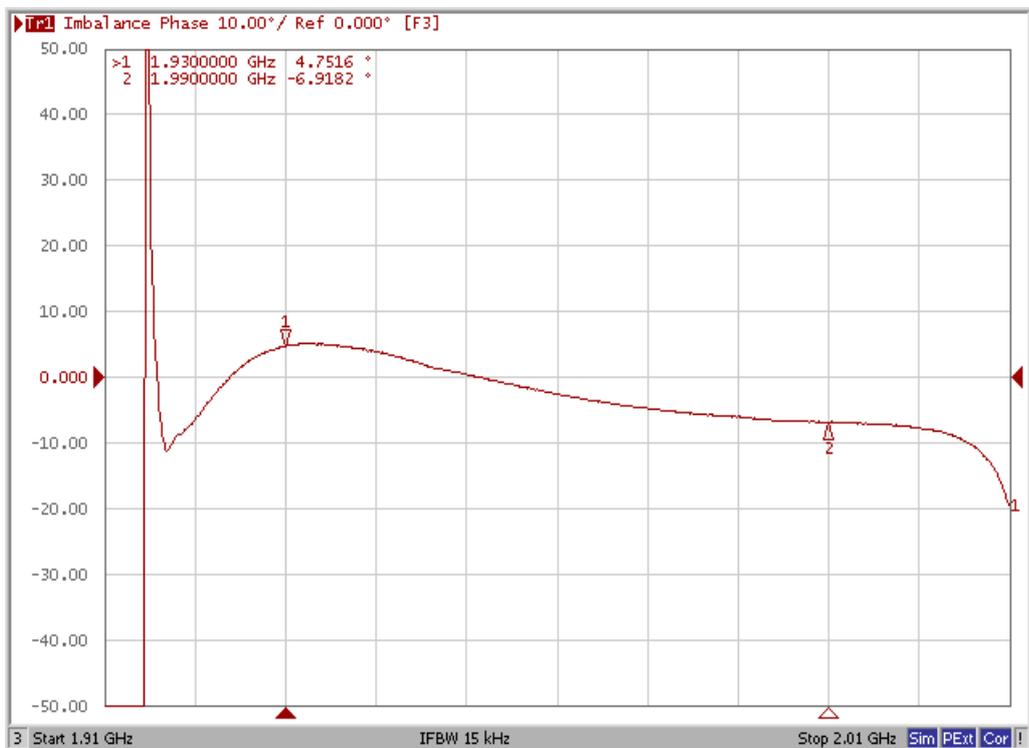
Ripple



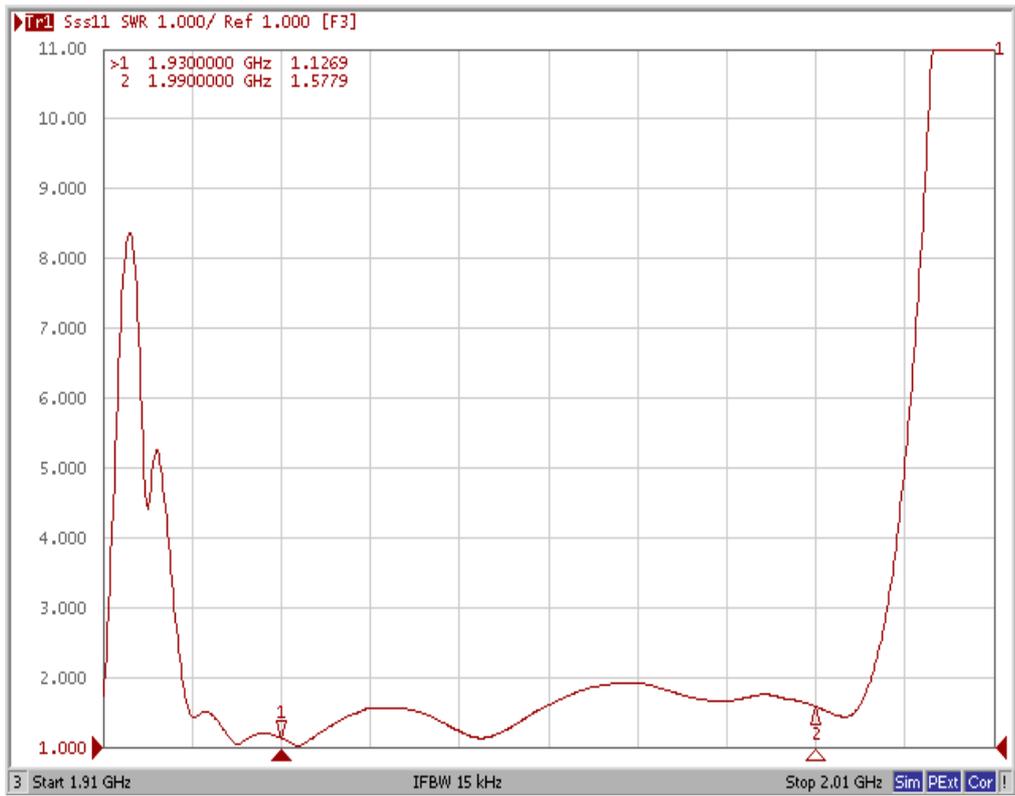
Amplitude balance



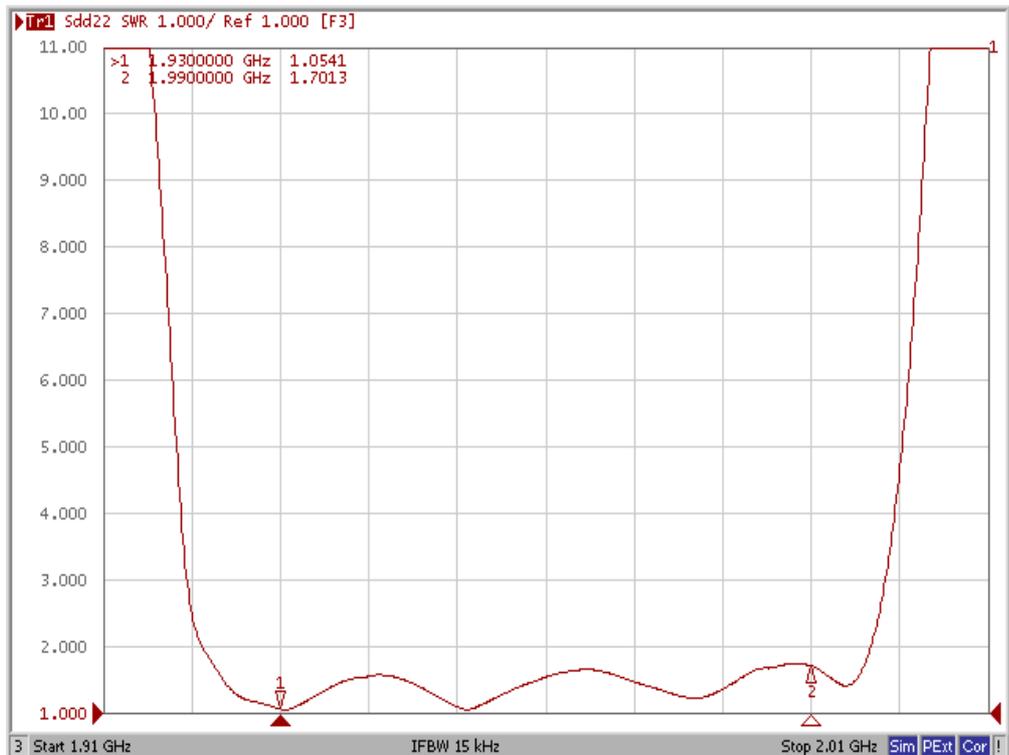
Phase balance



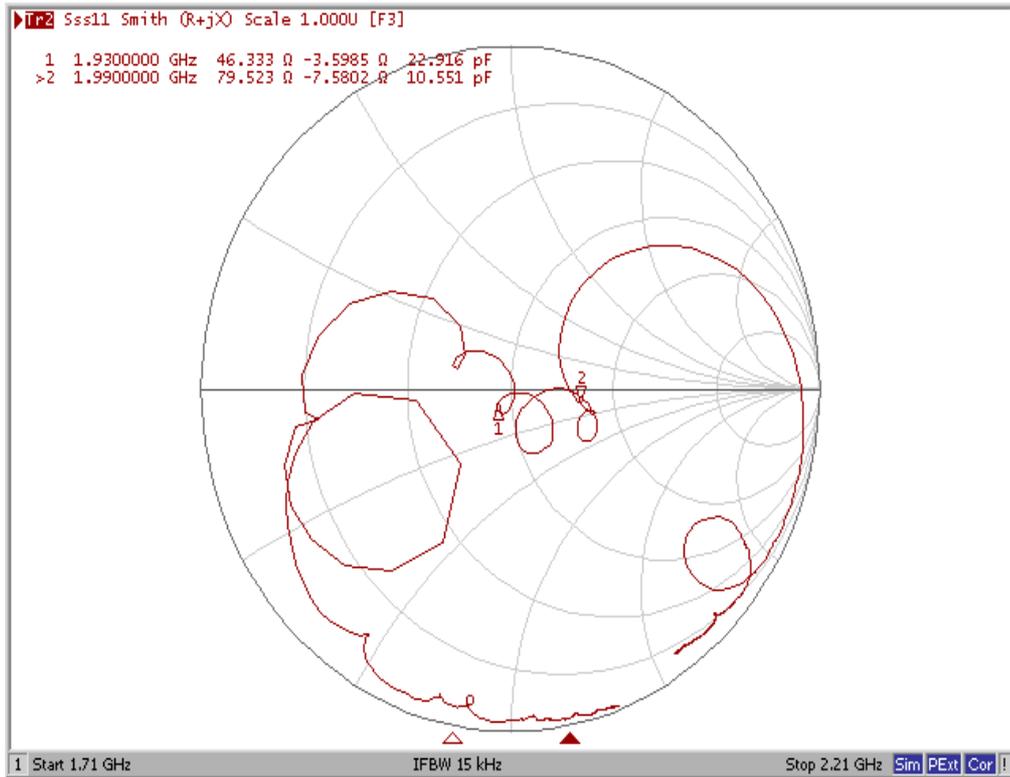
VSWR (S11)



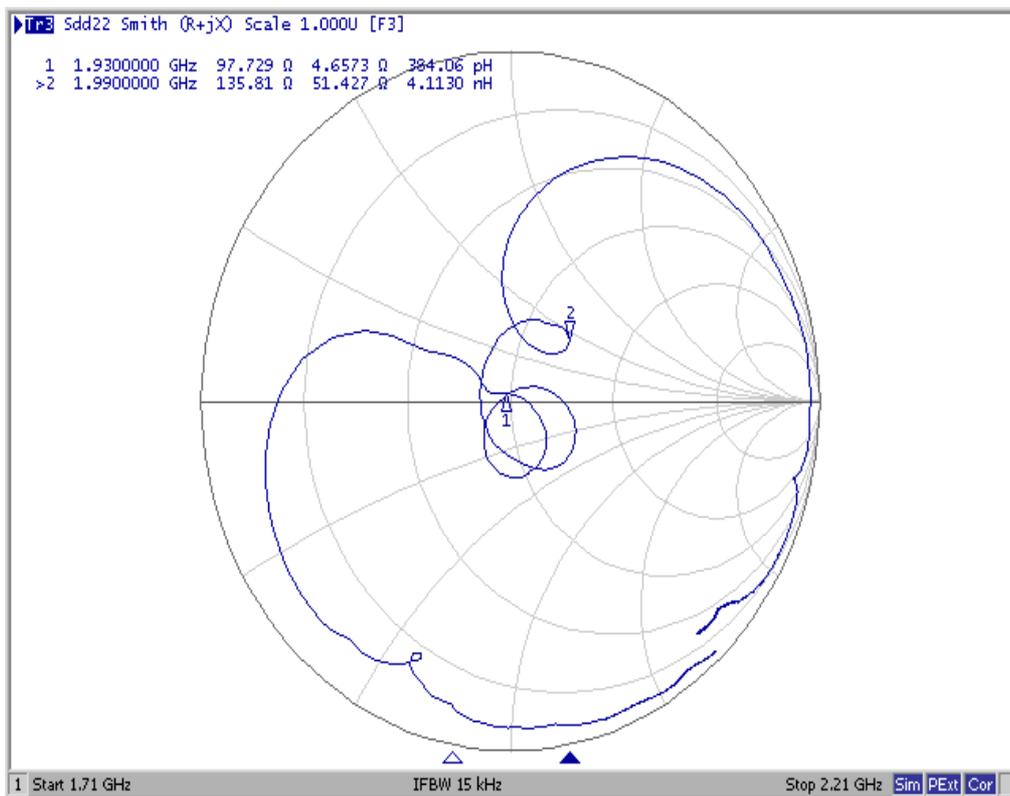
VSWR (S22)



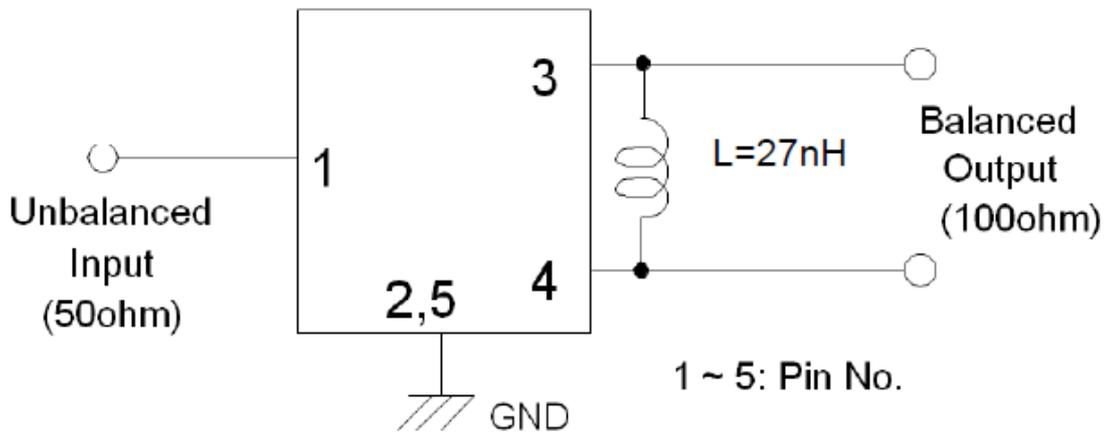
Smith Chart (S11)



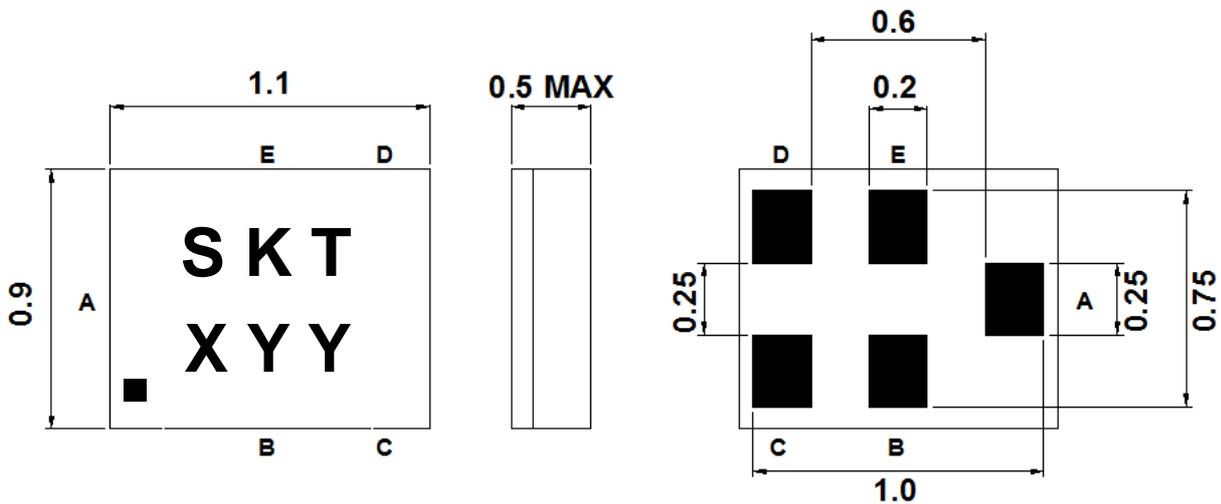
Smith Chart (S22)



D. MEASUREMENT CIRCUIT:



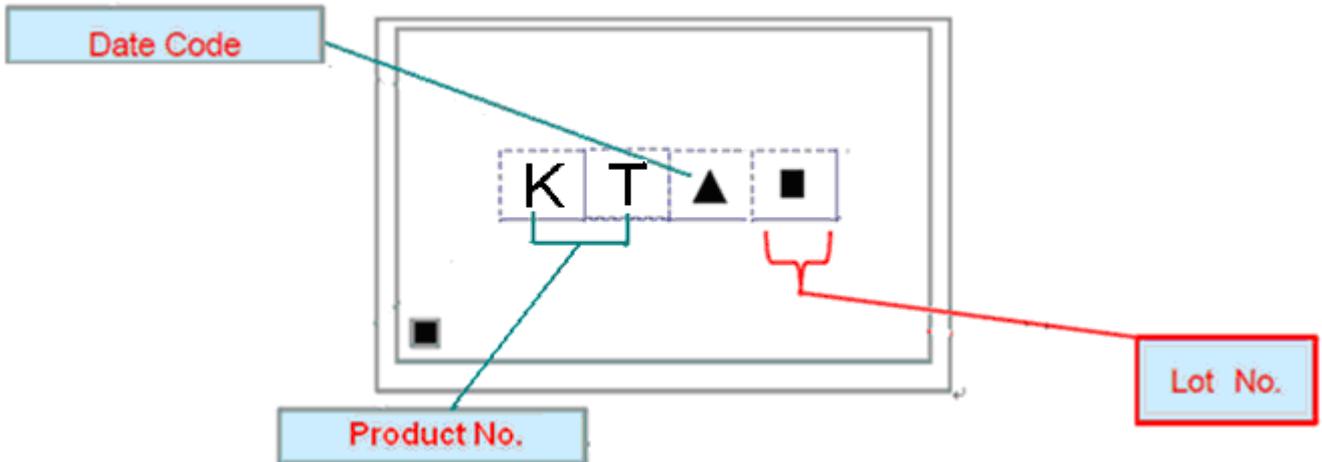
E. OUTLINE DRAWING:



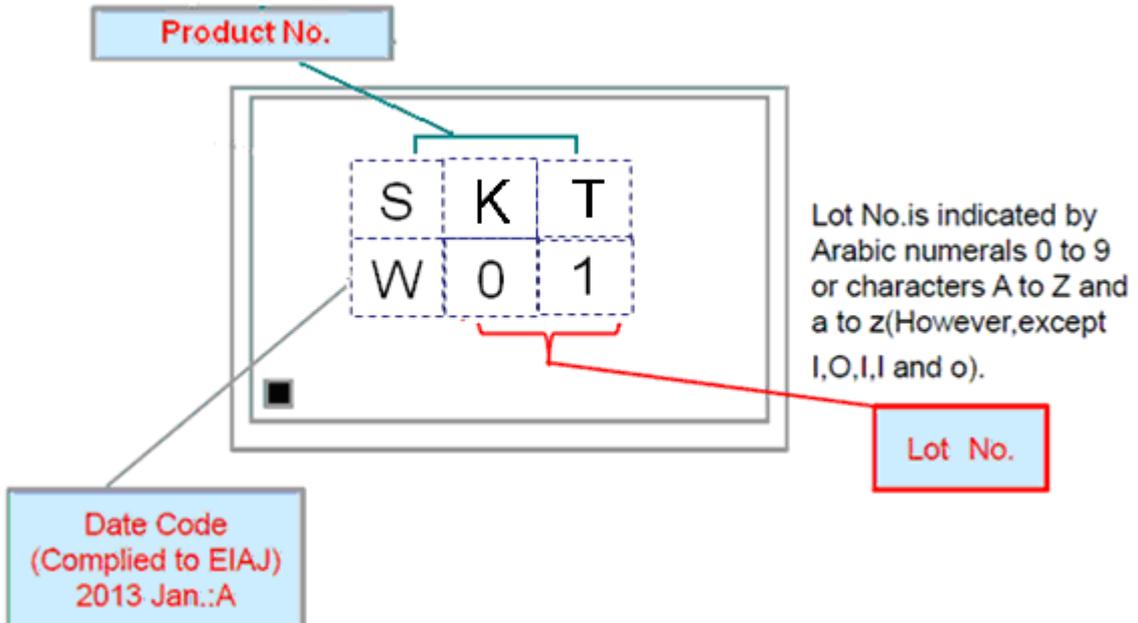
Marking Descriptions	
S	Product No 1
KT	Product No 2
X	Date Code(Year+Month)
YY	Lot No

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

Top View (Sample Production):



Top View (Mass Production):

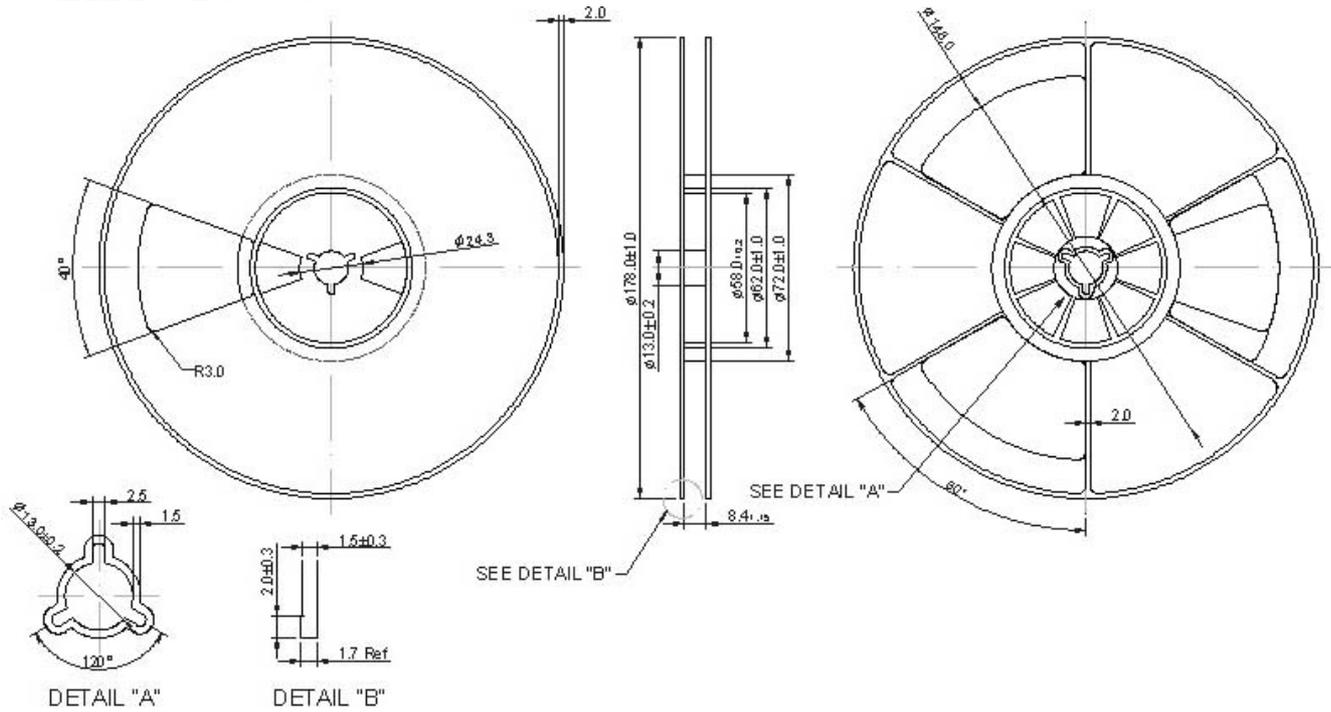


Product date Code (EIAJ)

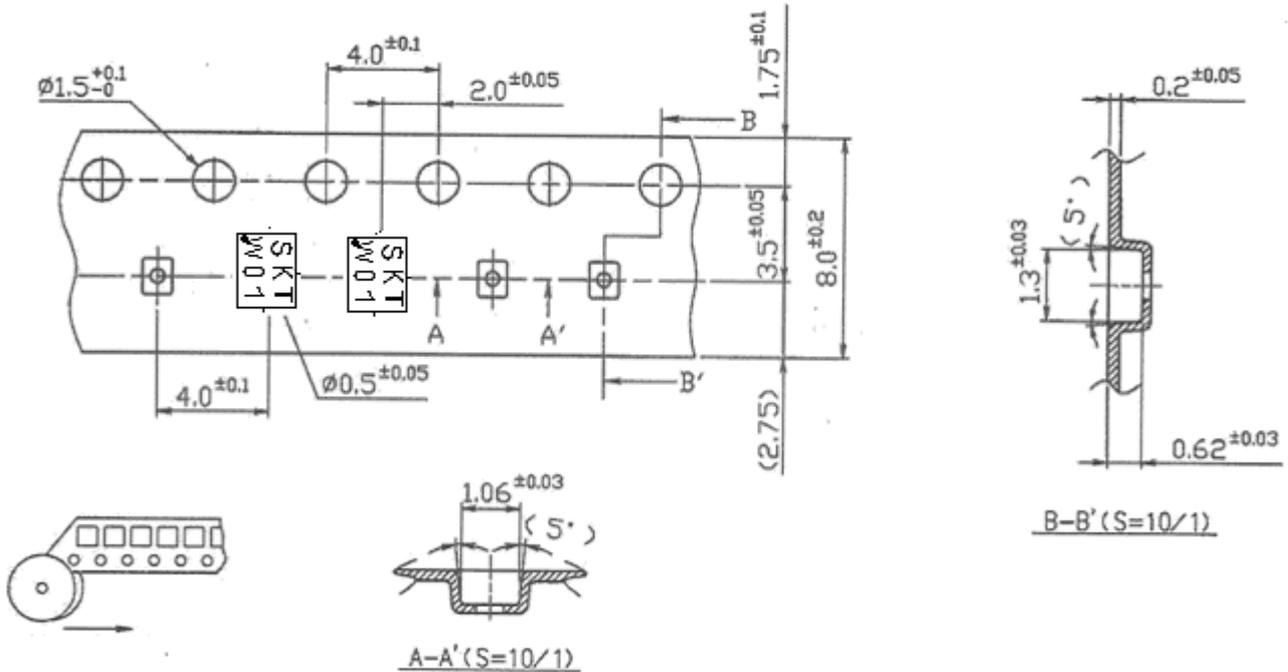
Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z

F. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



G. 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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

