



# 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 Rx Filter 942.5MHz LTE Band 8 SMD 1109

TST Part No.: TA1743A

Customer Part No.: \_\_\_\_\_

Customer signature required
<b>Company:</b> _____
<b>Division:</b> _____
<b>Approved by :</b> _____
<b>Date:</b> _____

Checked by: \_\_\_\_\_ Andy Yu *Andy Yu*

Approved by: \_\_\_\_\_ Bob Chau *Bob Chau*

Date: \_\_\_\_\_ 2017, 04. 05

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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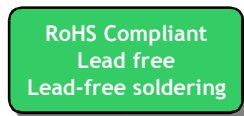
## SAW Rx Filter 942.5MHz LTE Band 8 SMD 1109 (35MHz BW)

MODEL NO.: TA1743A

REV. NO.:2

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 100V(MM) 200V(HBM)



Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

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

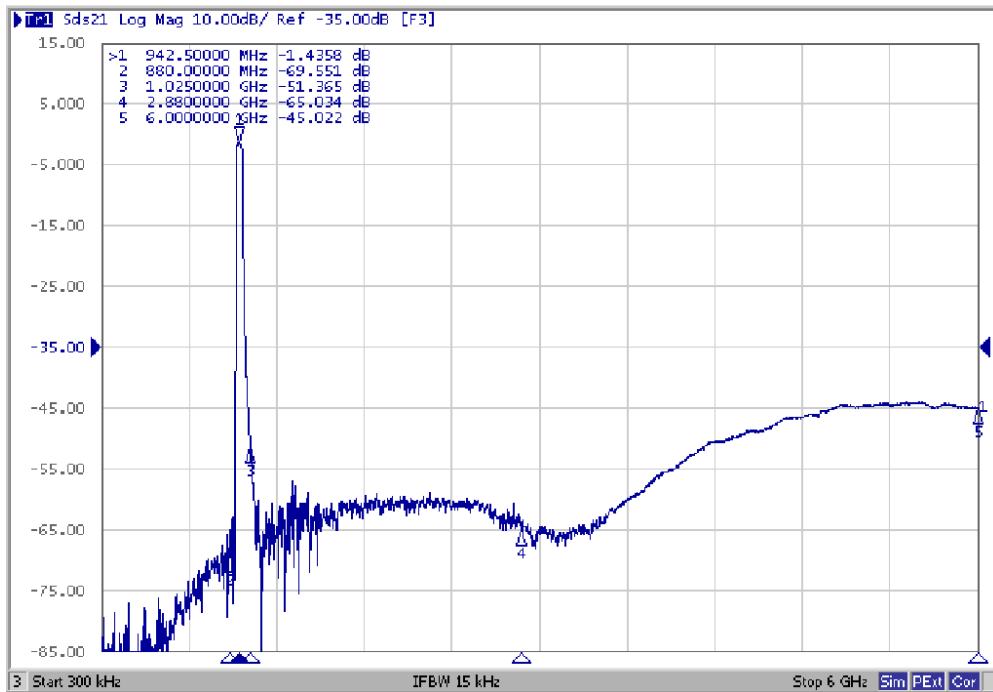
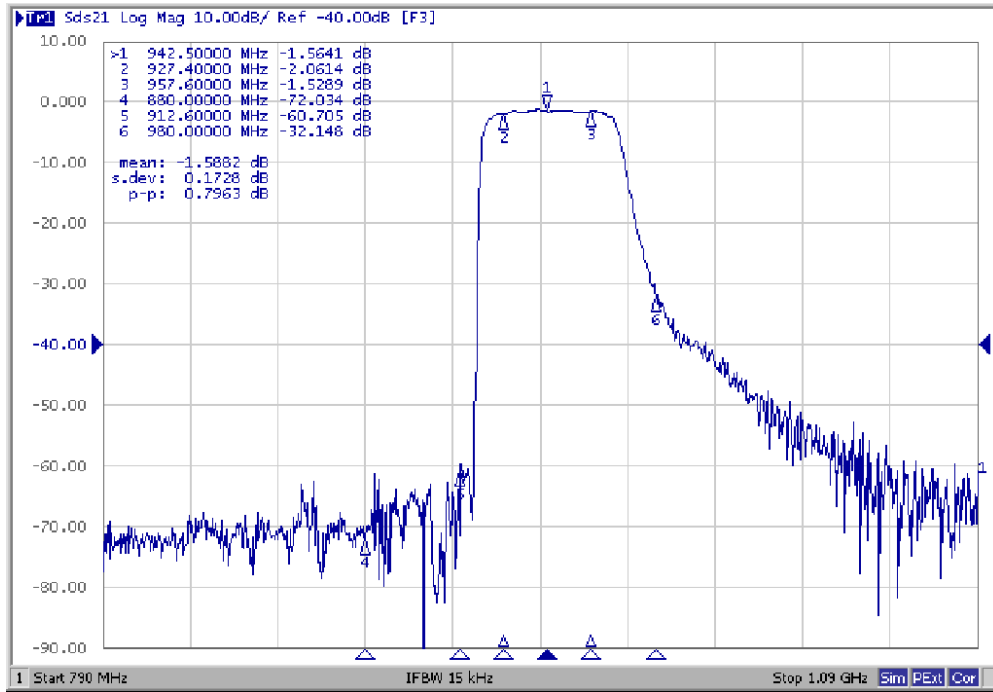
Terminating load impedance :  $Z_L = 100 \Omega$  (balanced)

Parameters Description		Unit	Min.	Typ.	Max.	Remark
Center Frequency (Fo)		MHz	-	942.5	-	
Insertion Loss	925.0 ~ 960.0 MHz	dB	-	2.0	2.6	
Amplitude Ripple	925.0 ~ 960.0 MHz	dB <sub>p-p</sub>	-	0.8	1.8	
VSWR	925.0 ~ 960.0 MHz	-	-	1.8	2.1	
Amplitude balance	925.0 ~ 960.0 MHz	dB	-1.0	-0.5 ~ +0.2	+1.0	
Phase balance	925.0 ~ 960.0 MHz	deg	-10	-3 ~ +1	+10	
Attenuation:						
DC ~ 880.0 MHz		dB	50	60	-	
880.0 ~ 915.0 MHz		dB	48	56	-	
980.0 ~ 1020.0 MHz		dB	23	30	-	
1020.0 ~ 2880.0 MHz		dB	40	55	-	
2880.0 ~6000.0 MHz		dB	30	45	-	

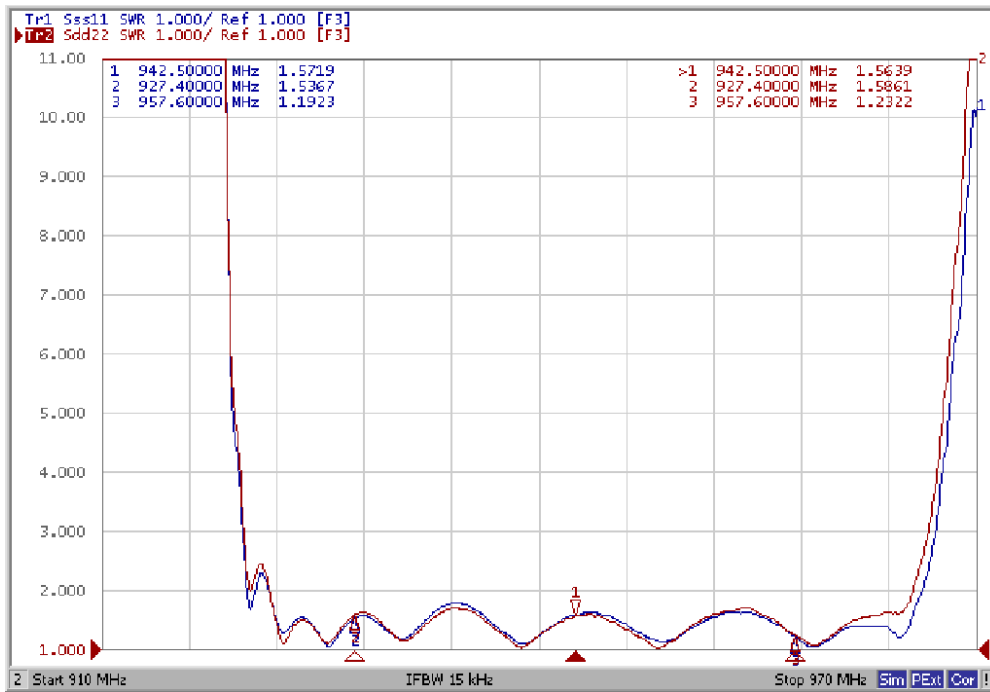
**Notes :** (1) No Matching Network .

### C. FREQUENCY CHARACTERISTICS:

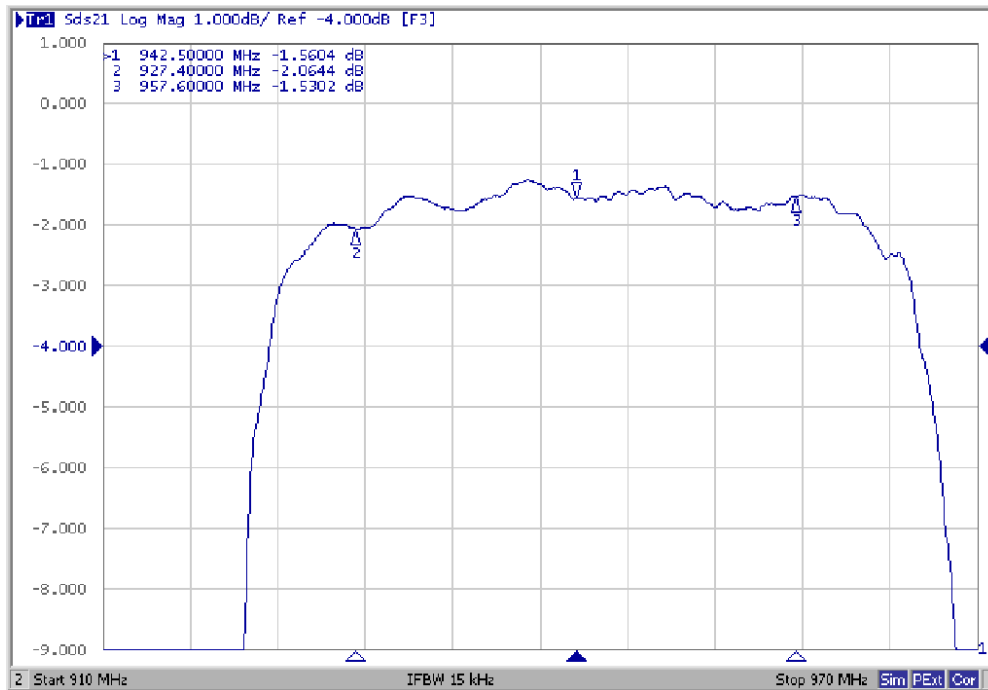
#### Frequency Response



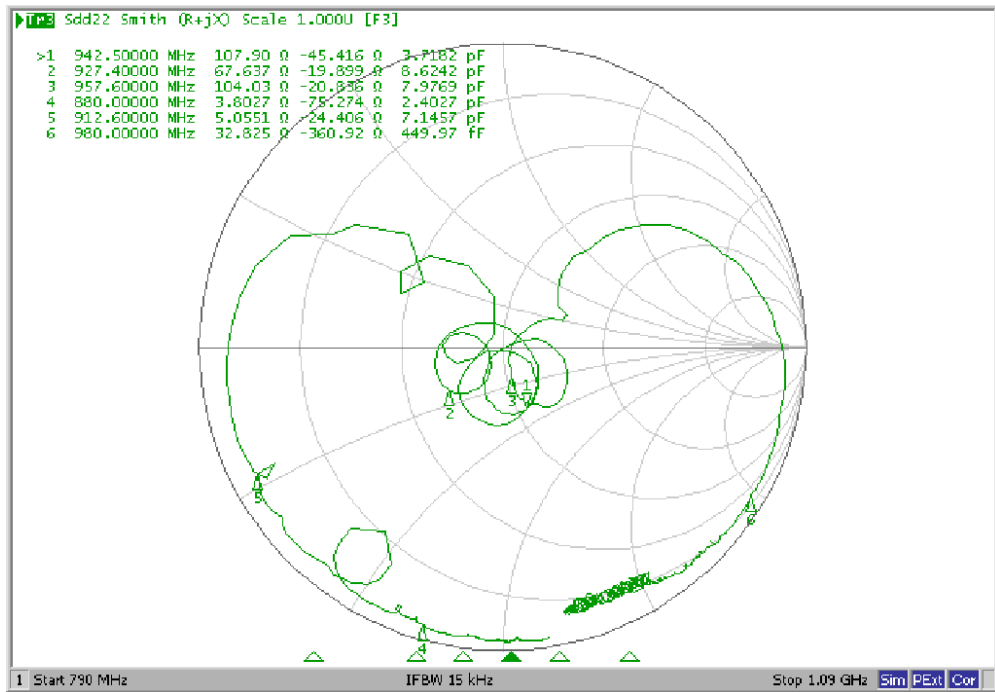
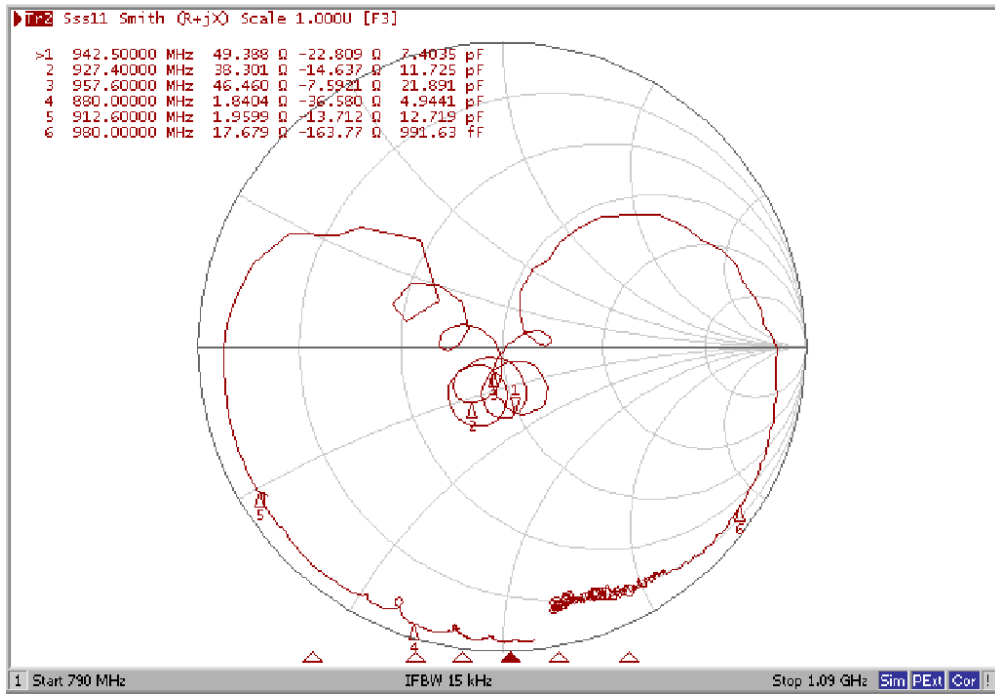
## VSWR



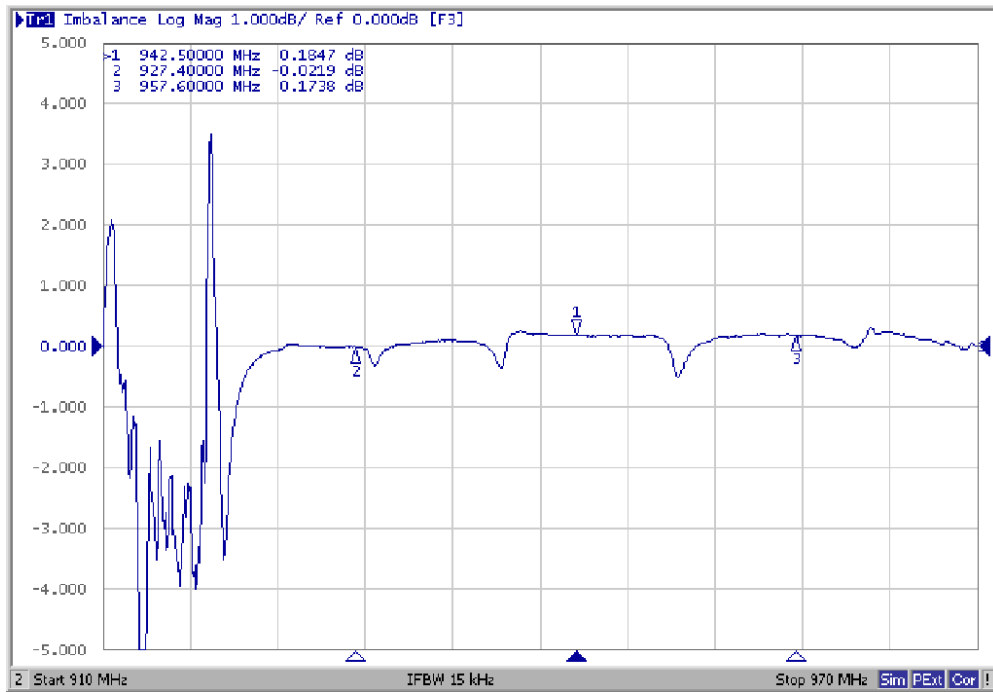
## Ripple



# Smith Chart



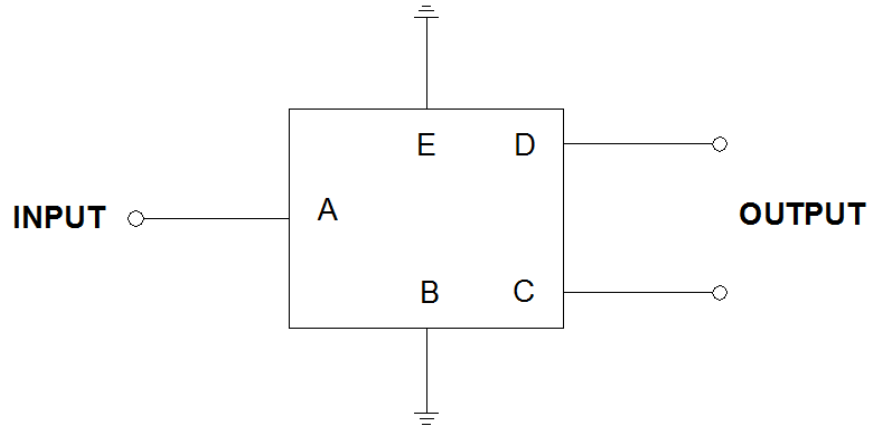
## Amplitude balance



## Phase balance



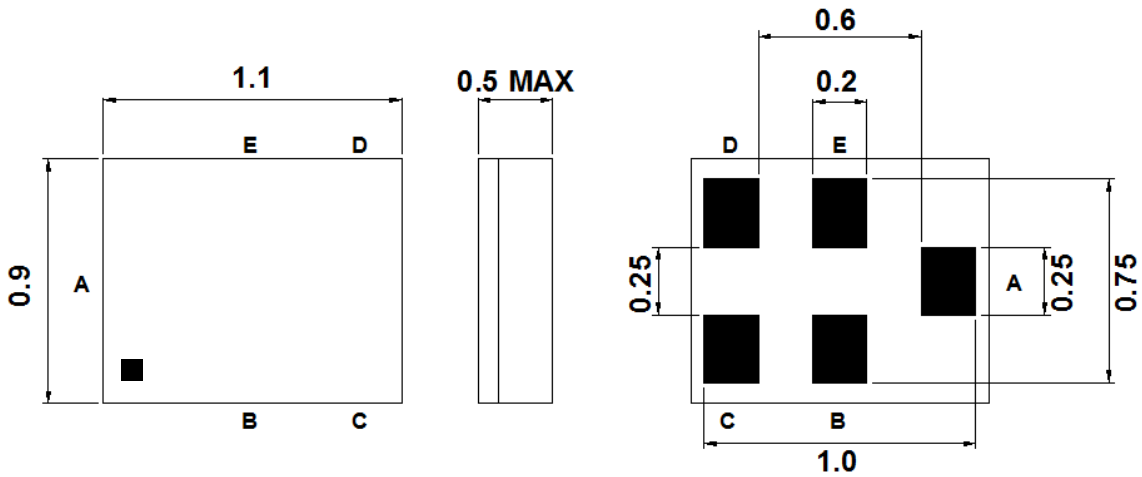
**D. MEASUREMENT CIRCUIT:**



Source Impedance: 50 Ω

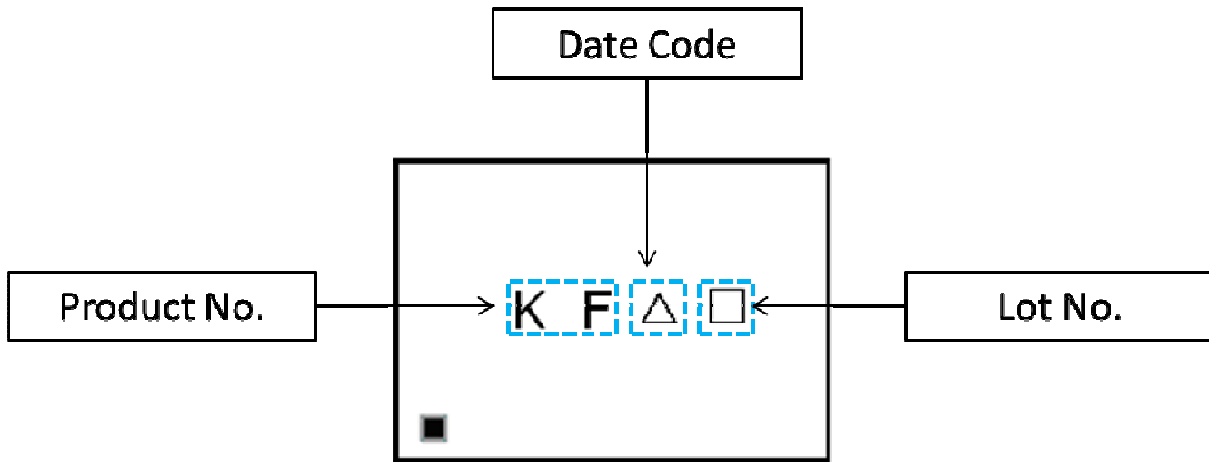
Load Impedance: 100 Ω

**E. OUTLINE DRAWING:**

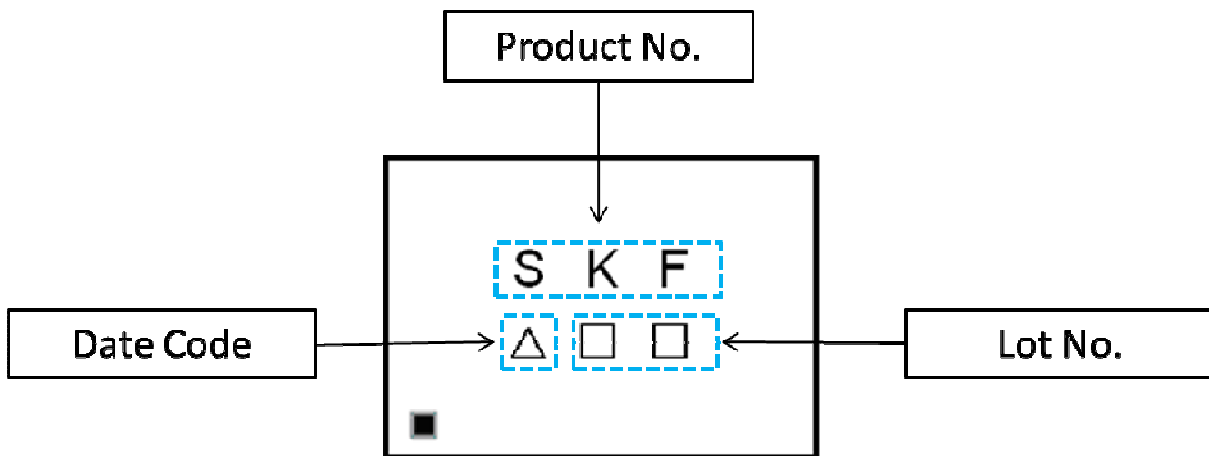


Pin Description	
B, E	Ground
A	Input
C, D	Balanced Output

**Top View (Sample Production):**



**Top View (Mass Production):**



△ : Date Code

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

**Product date Code (EIAJ)**

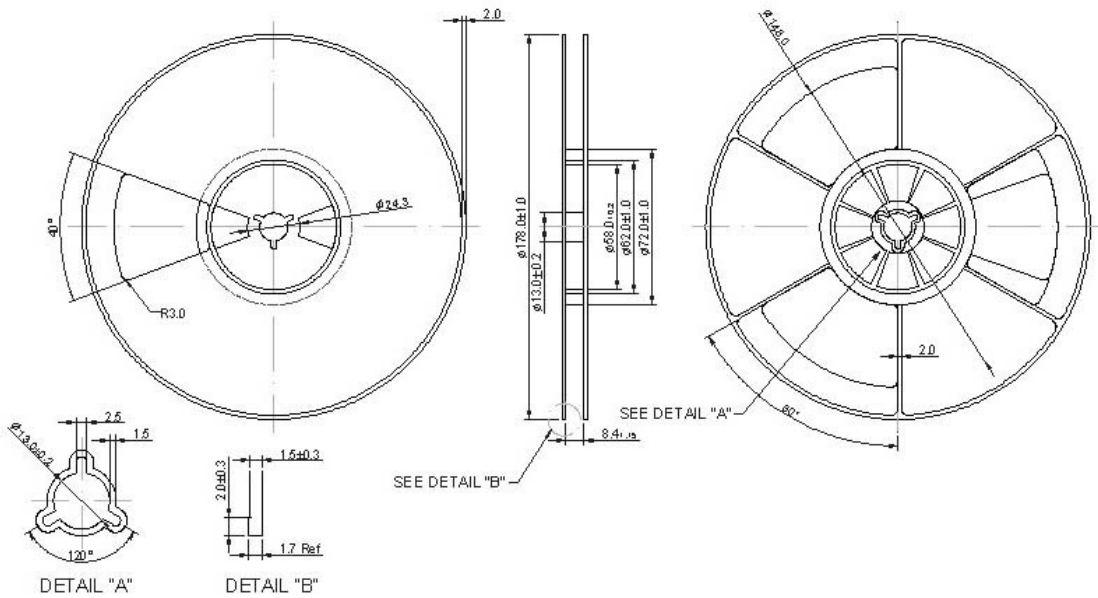
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z



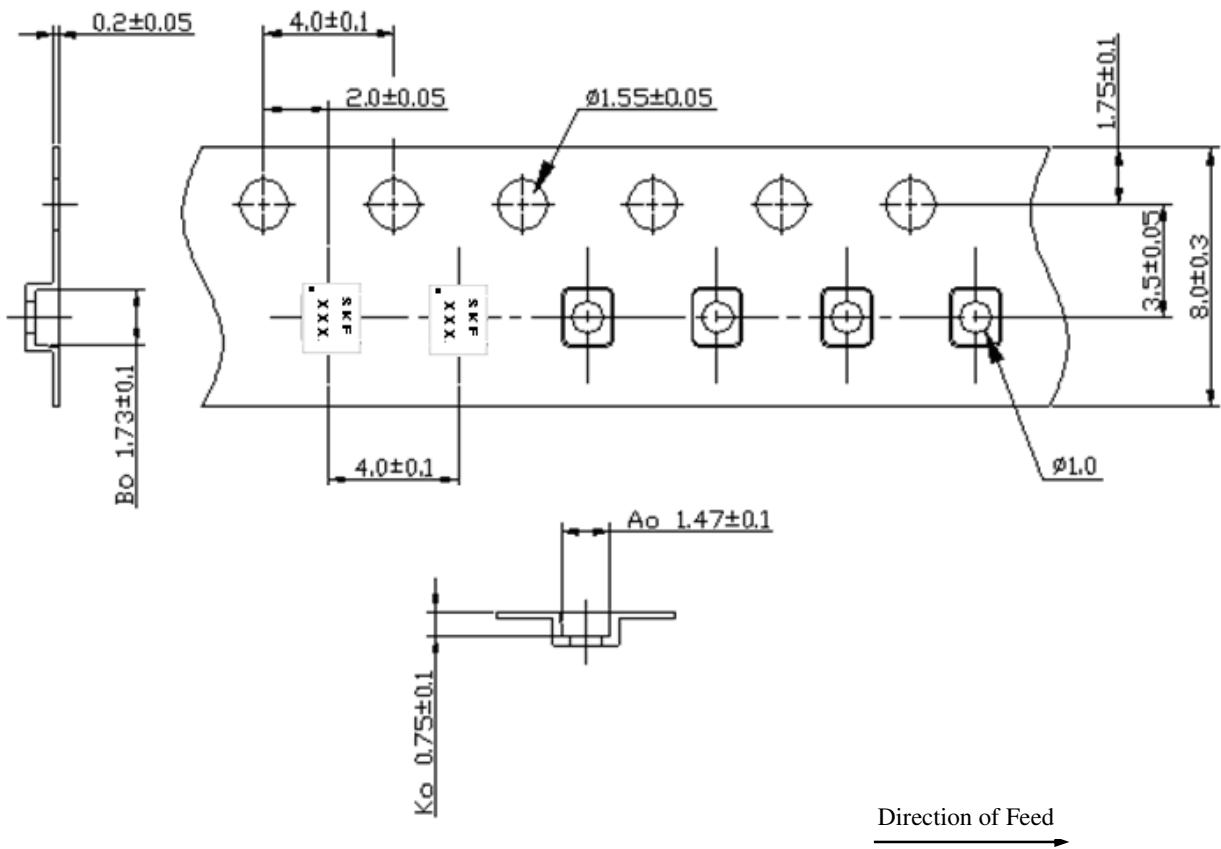
**F. PACKING:**

**1. REEL DIMENSION**

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



**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.

