



TAI-SAW TECHNOLOGY CO., LTD.

Product Specifications Approval Sheet

Product Description: SAW Tx Filter 1950MHz LTE Band 1 SMD 1109

TST Part No.: TA1815A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

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 Tx Filter 1950MHz LTE Band 1 SMD 1109 (60MHz BW)

MODEL NO.: TA1815A

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 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega$

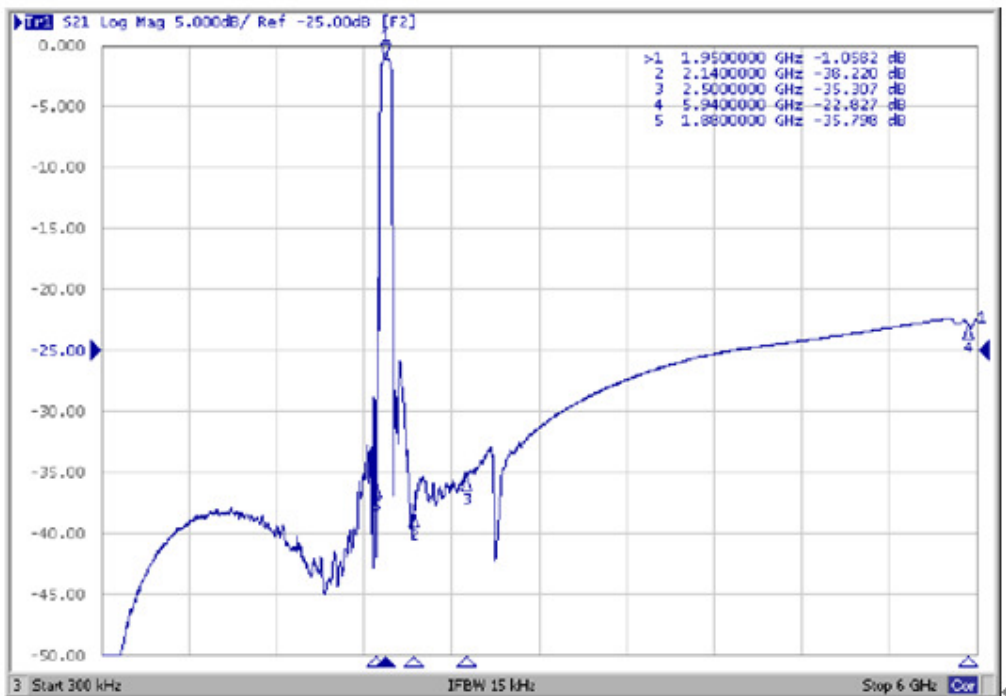
Terminating load impedance : $Z_L = 50 \Omega$

Parameters Description	Unit	Min.	Typ.	Max.	Remark
Center Frequency (Fo)	MHz	-	1950	-	
Insertion Loss within 1920.0~1980.0MHz	dB	-	1.8	2.3	
Amplitude Ripple within 1920.0~1980.0MHz	dB _{p-p}	-	0.8	1.8	
VSWR within 1920.0~1980.0MHz	-	-	1.8	2.2	
Attenuation:					
DC ~ 1577.0 MHz	dB	30	34	-	
1577.0 ~ 1880.0 MHz	dB	22	29	-	
2110.0 ~ 2170.0 MHz	dB	35	38	-	
2500.0 ~ 3120.0 MHz	dB	28	33	-	
3840.0 ~ 3960.0 MHz	dB	25	29	-	
5760.0 ~ 5940.0 MHz	dB	15	22	-	

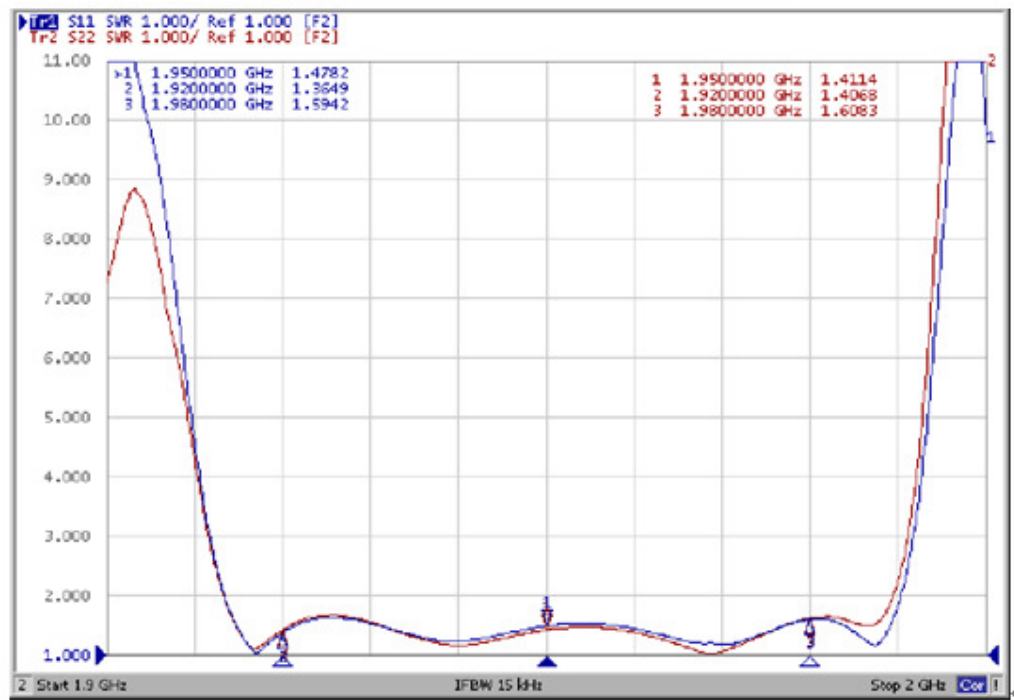
Notes : (1) No Matching Network .

C. FREQUENCY CHARACTERISTICS:

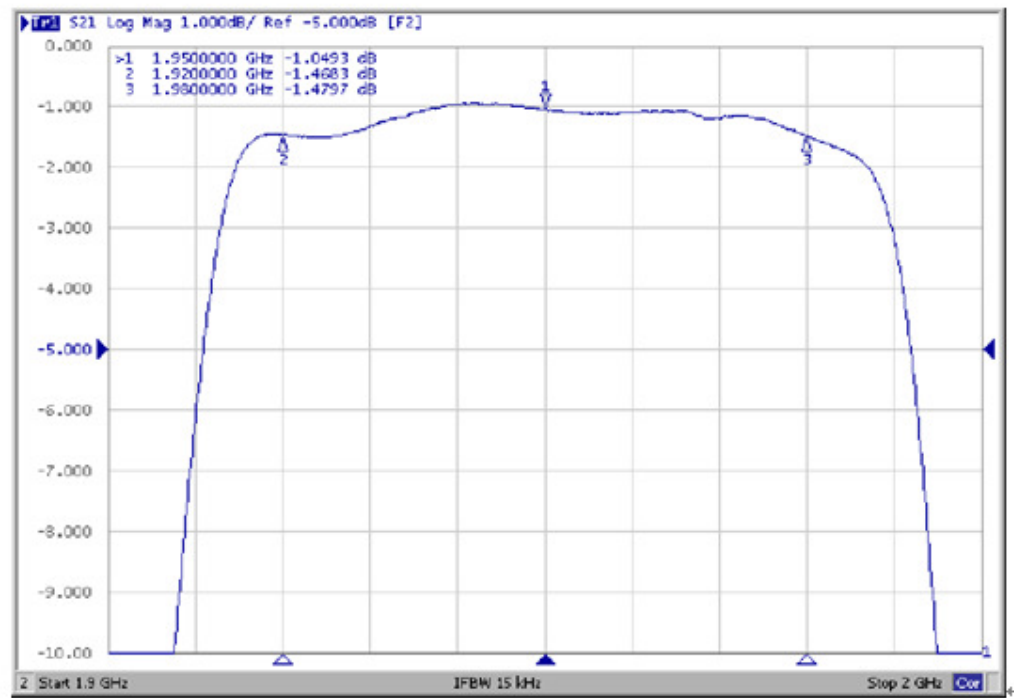
Frequency Response



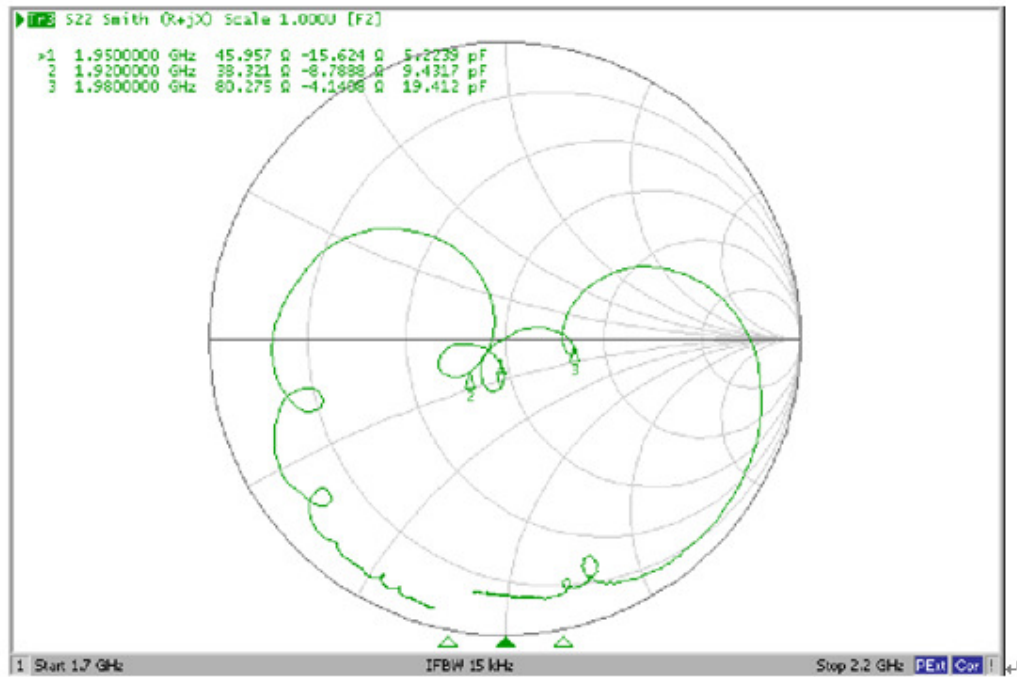
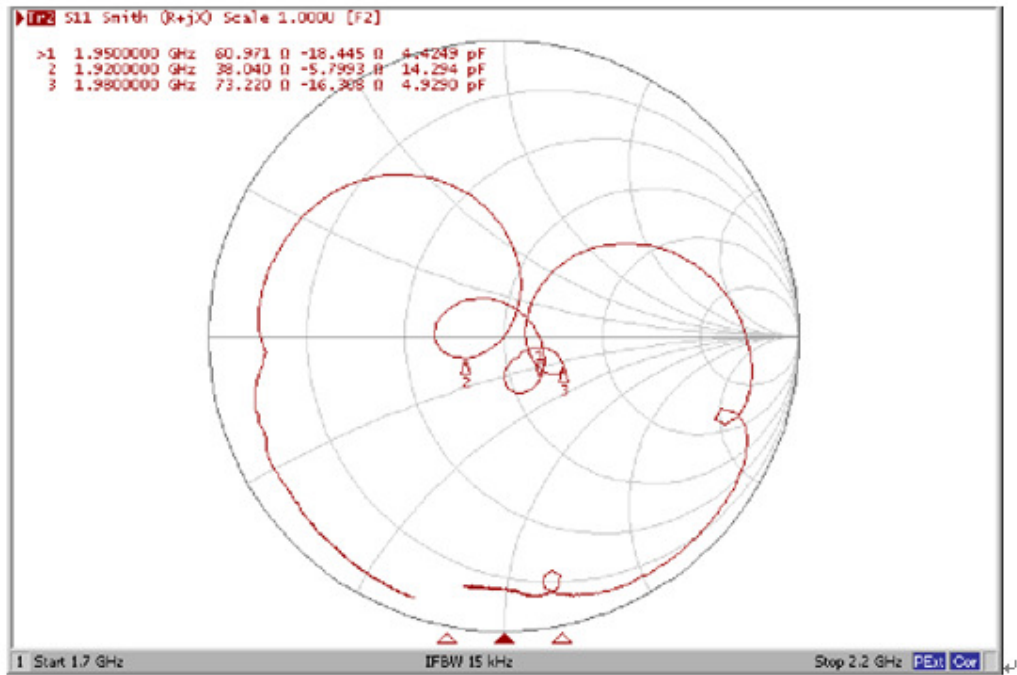
VSWR



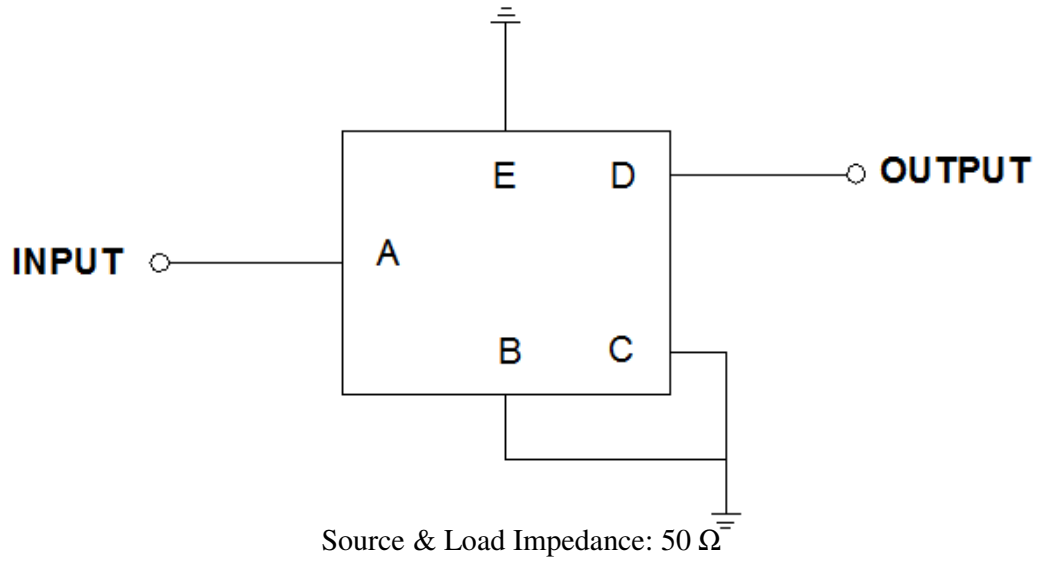
Ripple



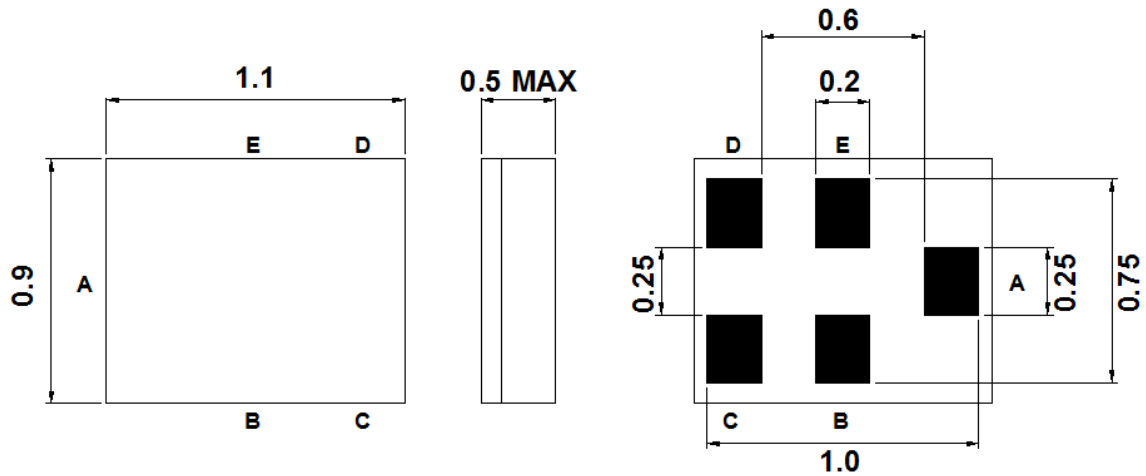
Smith Chart



D. MEASUREMENT CIRCUIT:

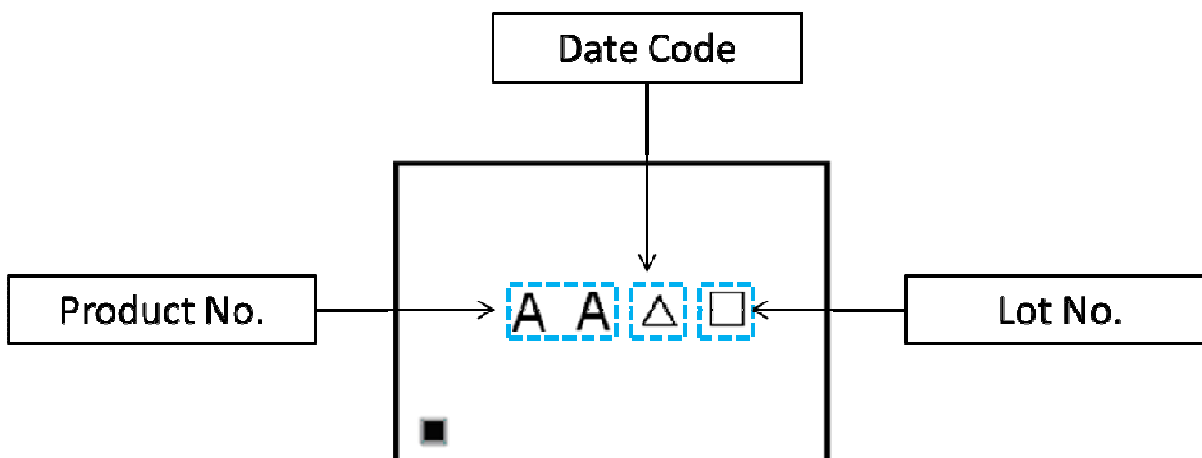


E. OUTLINE DRAWING:

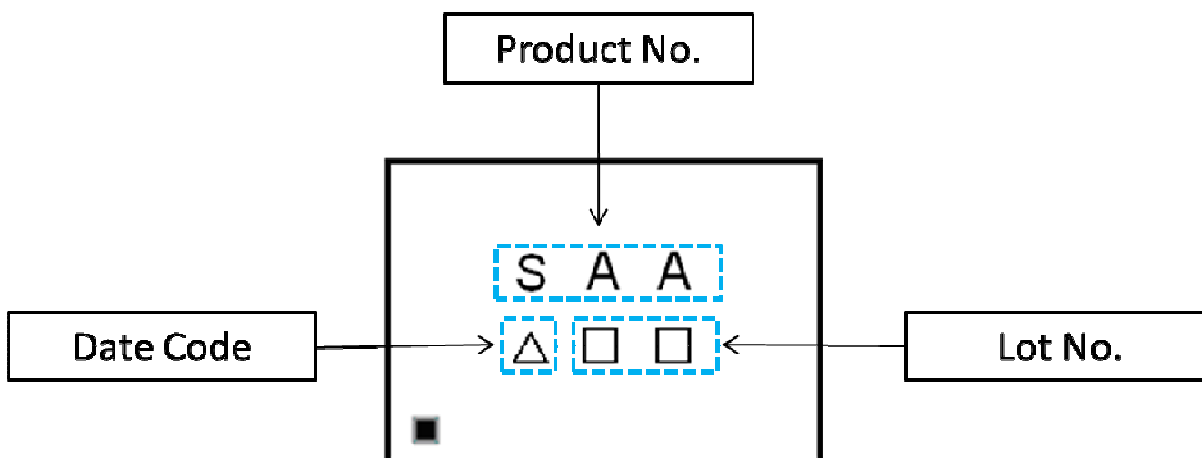


Pin Description	
B, C, E	Ground
A	Input
D	Output

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)

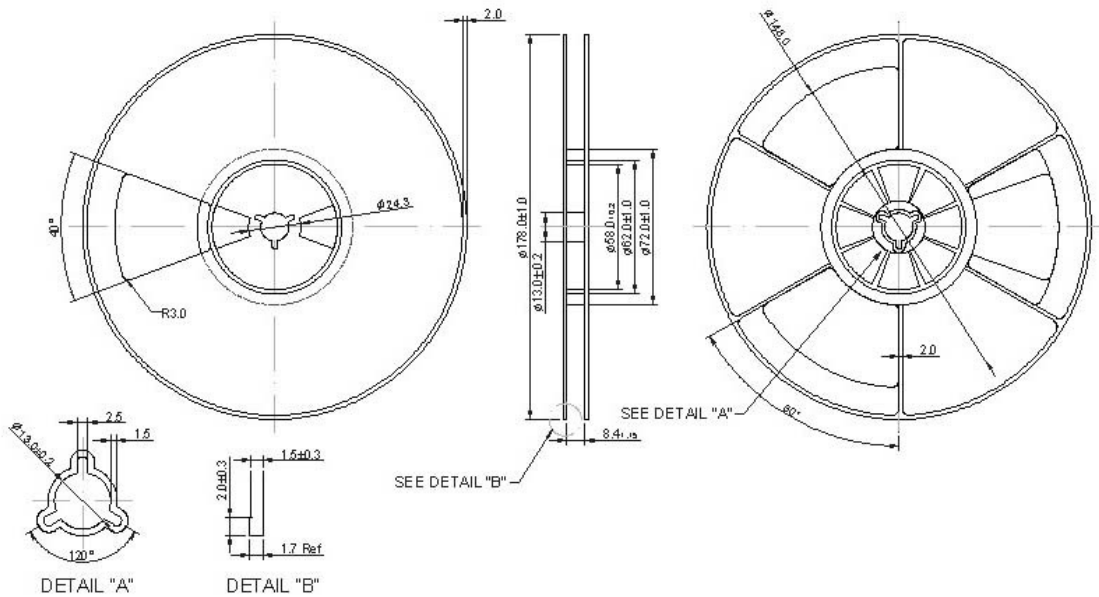
Product date Code (EIAJ)

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

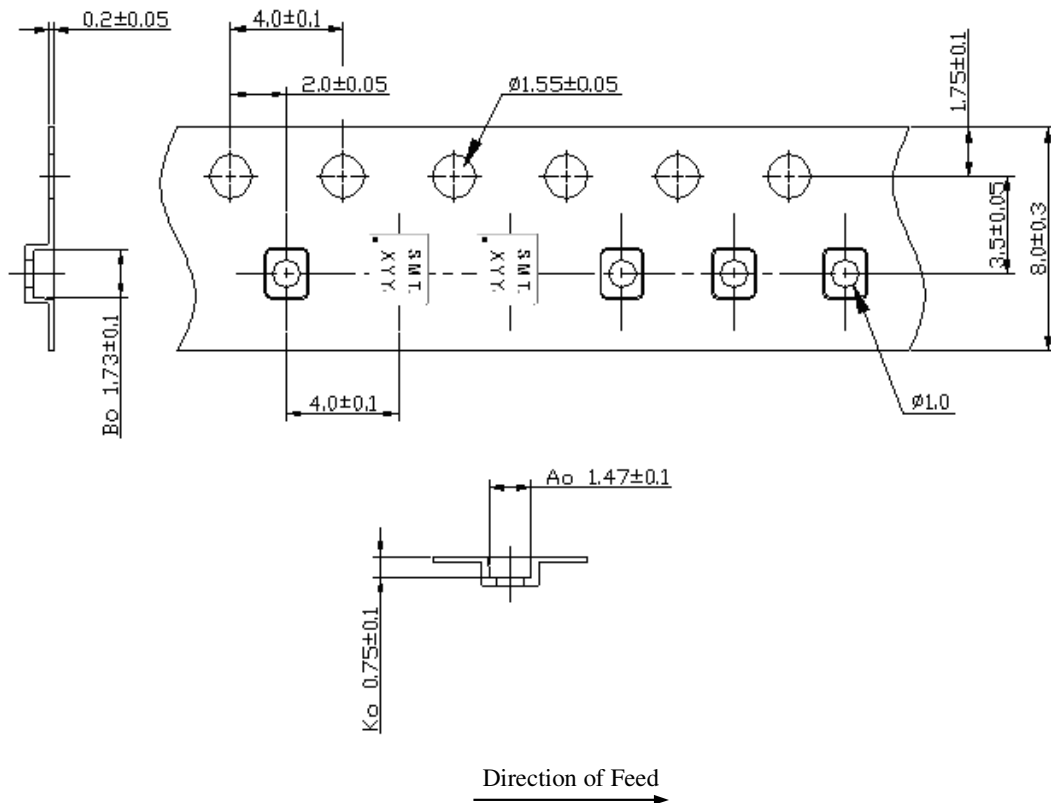
F. PACKING:

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.

