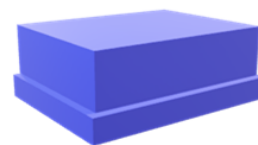


**SF2545LM**

**836.5 MHz  
SAW Filter**



**SM1109**

## MAXIMUM RATING

- Maximum Input Power: 13 dBm(in passband)
- Operating Temperature: -30 °C to +85 °C
- Storage Temperature: -40 °C to +100 °C
- ESD: 100 V(MM), 200 V(HBM)
- Moisture Sensitive Level: Level 1(MSL1)

## ELECTRICAL CHARACTERISTICS

Terminating source impedance:  $Z_s = 50 \Omega$

Terminating load impedance:  $Z_L = 50 \Omega$

Parameters Description		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	836.5	-
Insertion Loss	824~849 MHz	dB	-	1.9	2.3
Amplitude ripple	824~849 MHz	dB <sub>p-p</sub>	-	0.8	1.3
VSWR(Input)	824~849 MHz	-	-	2.0	2.3
VSWR(Output)	824~849 MHz	-	-	2.0	2.3
<b>Attenuation:</b>					
<b>DC~750 MHz</b>		dB	35	41	-
<b>750~800 MHz</b>		dB	28	34	-
<b>869~894 MHz</b>		dB	40	45	-
<b>894~1050 MHz</b>		dB	38	42	-
<b>1050~1210 MHz</b>		dB	35	40	-
<b>1210~1580 MHz</b>		dB	30	35	-
<b>1580~2000 MHz</b>		dB	28	32	-
<b>2000~3000 MHz</b>		dB	23	27	-
<b>3000~6000 MHz</b>		dB	12	18	-

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



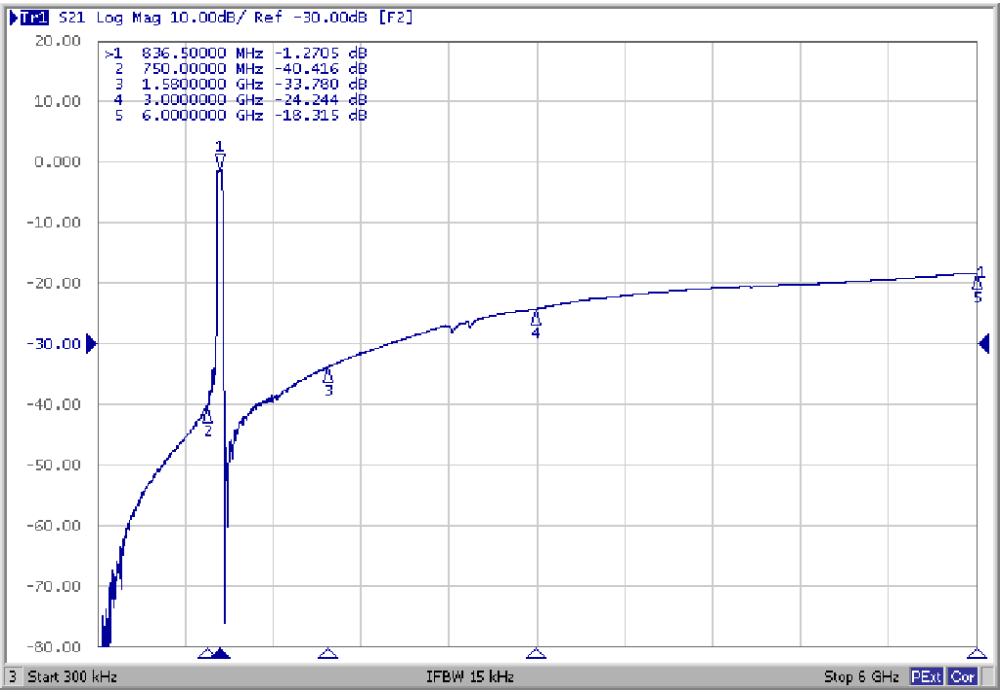
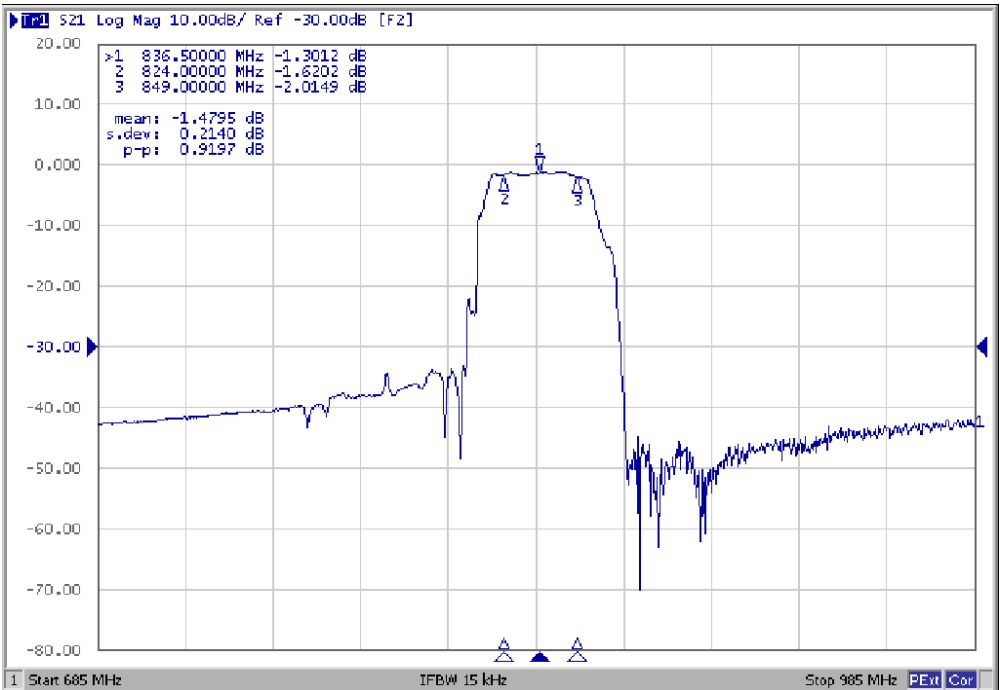
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

### NOTES:

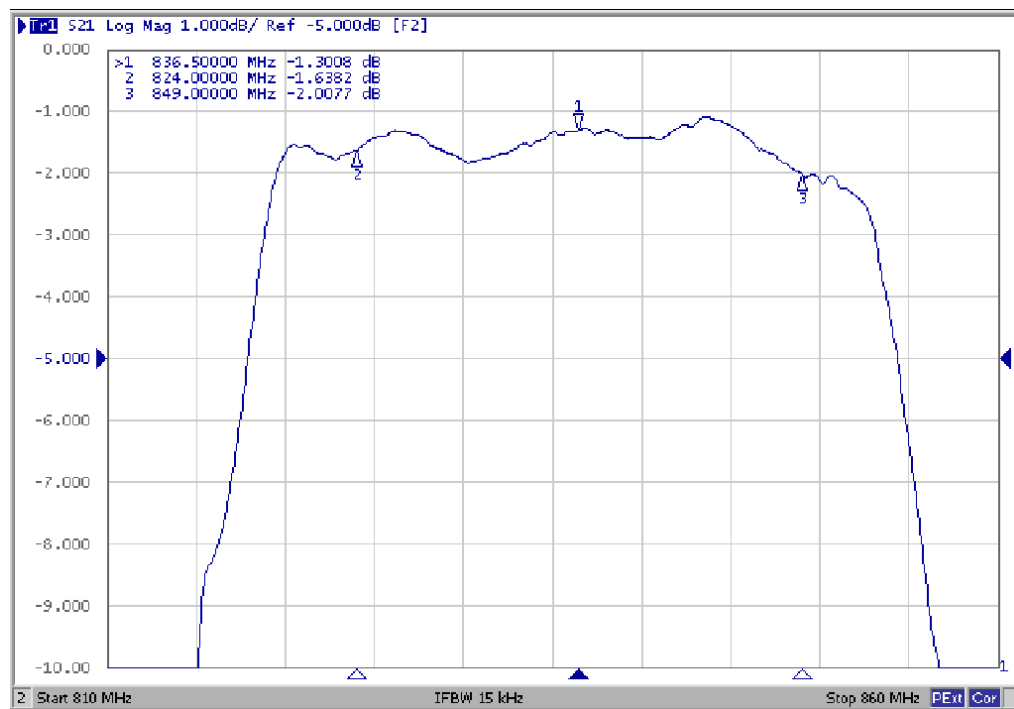
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

FREQUENCY CHARACTERISTIC:

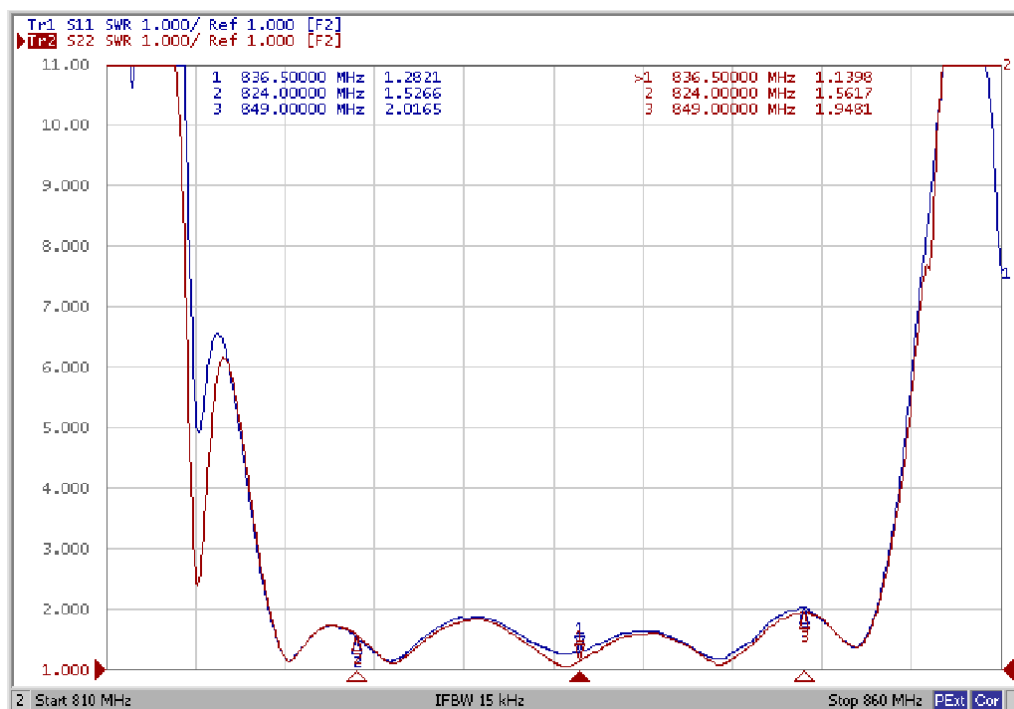
Frequency Response



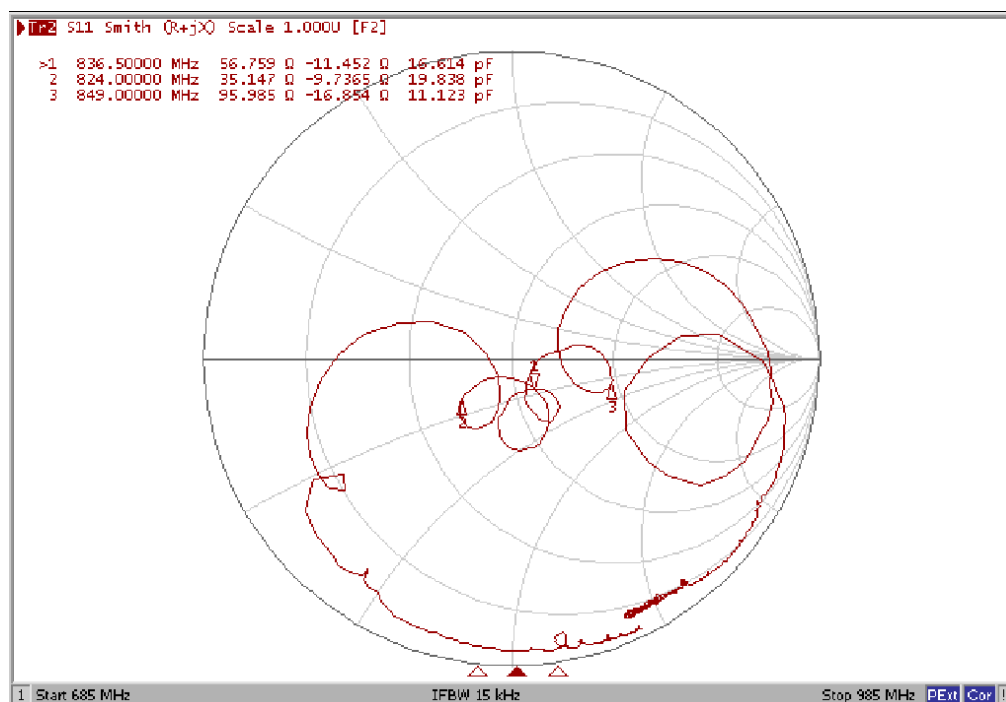
## Ripple



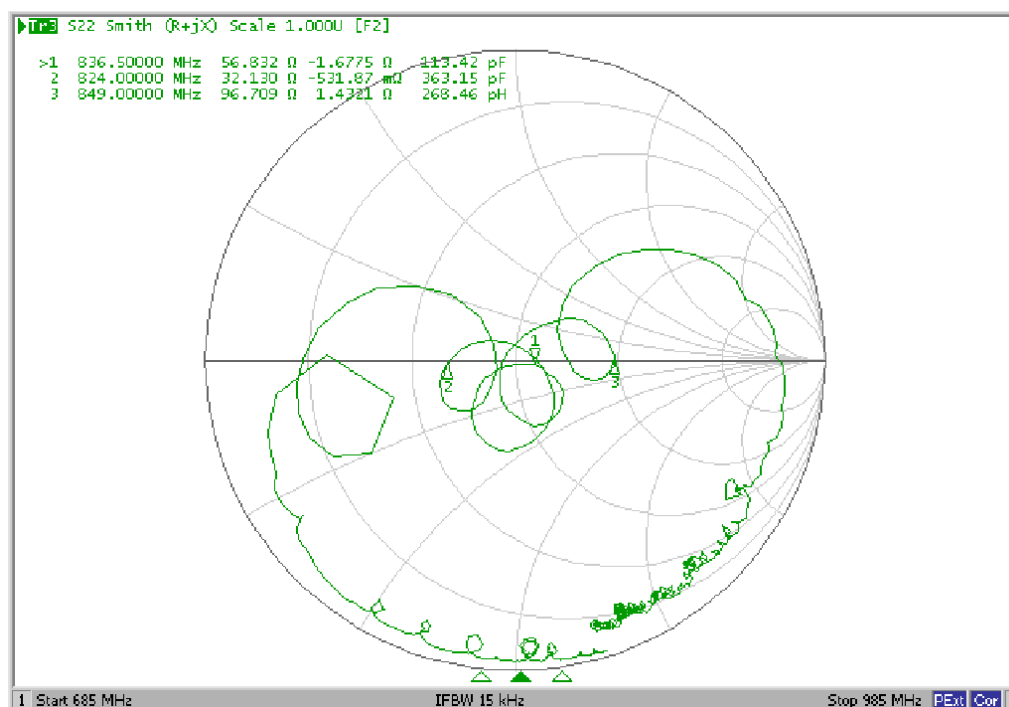
## VSWR



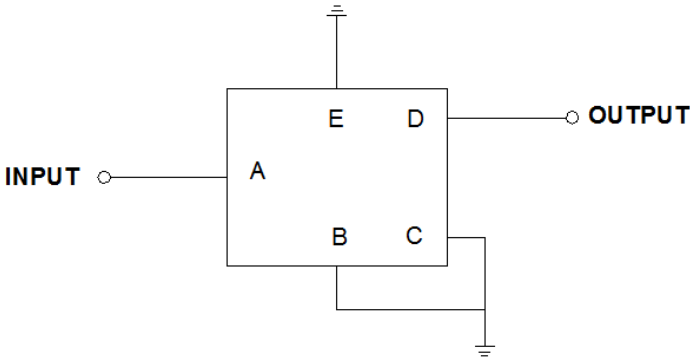
## Smith Chart (S11)



## Smith Chart (S22)

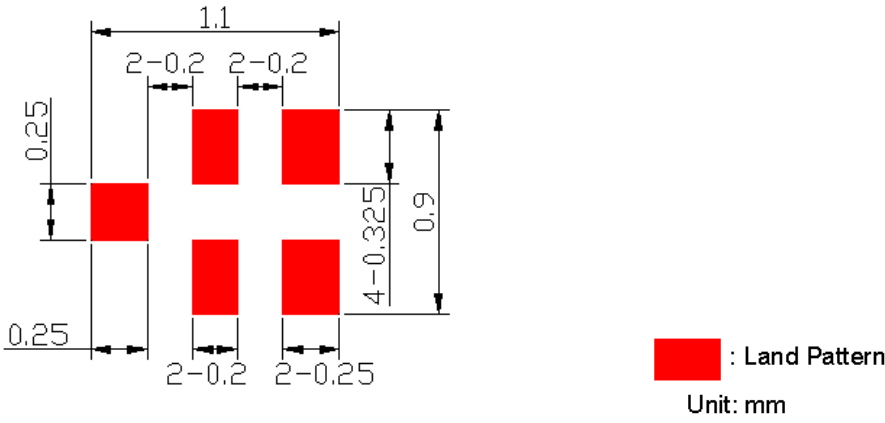


**MEASUREMENT CIRCUIT:**

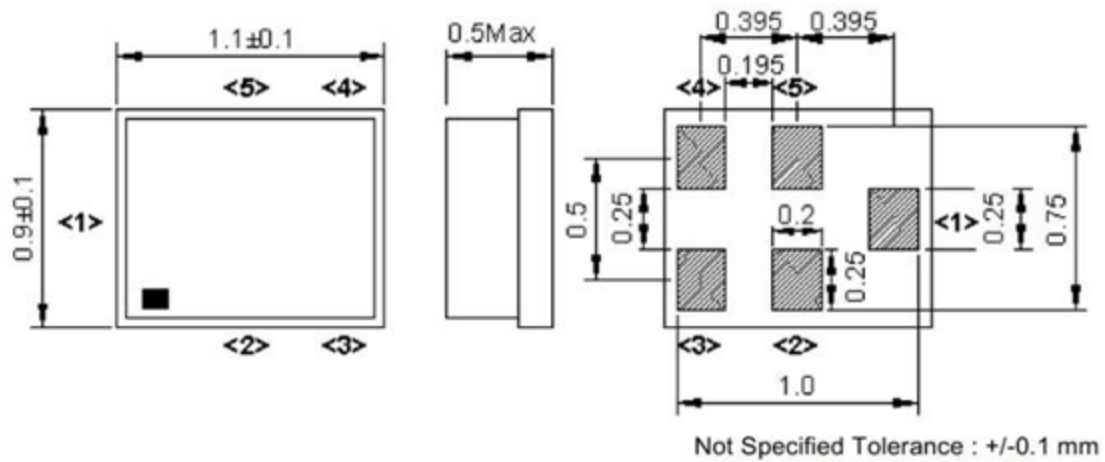


Source & Load Impedance: 50  $\Omega$

**PCB Footprint:**



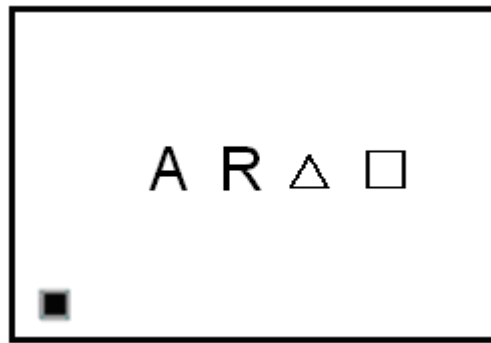
## OUTLINE DRAWING:



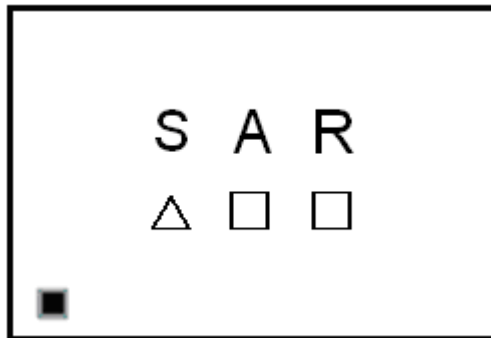
## Pin Configuration

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

**Top View (Sample Production):**



**Top View (Mass Production):**



**Δ : Date Code**

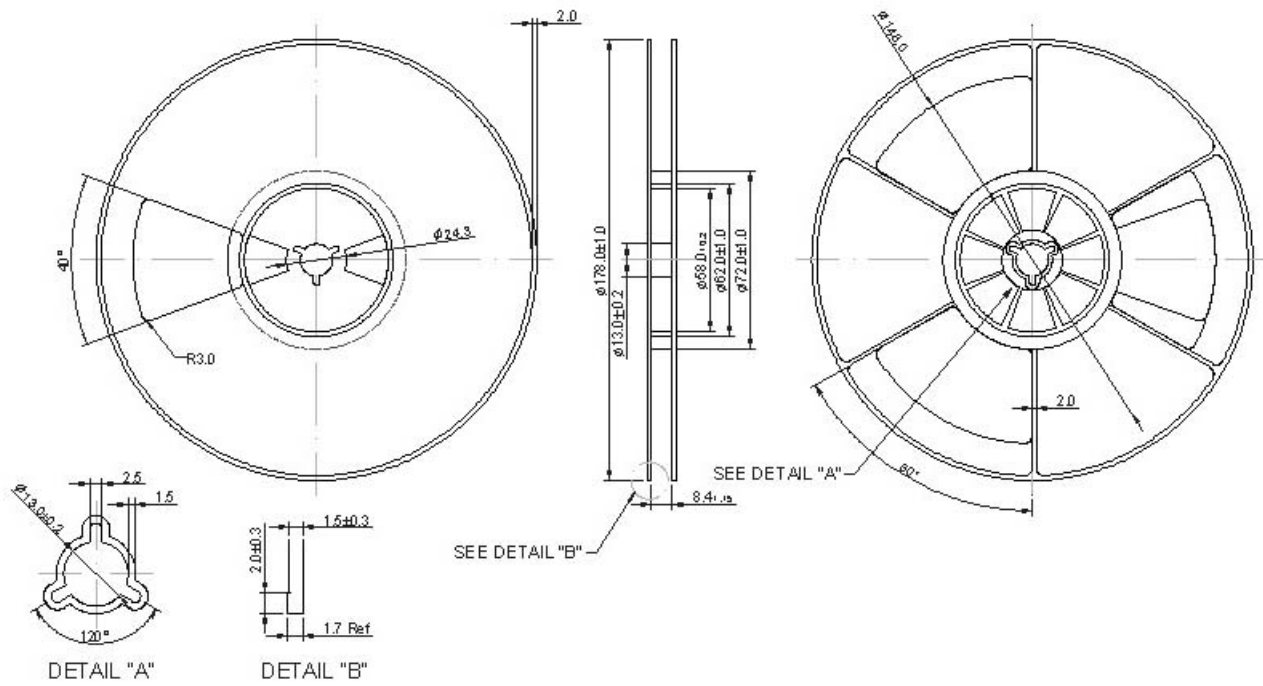
**□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)**

**Date Code:**

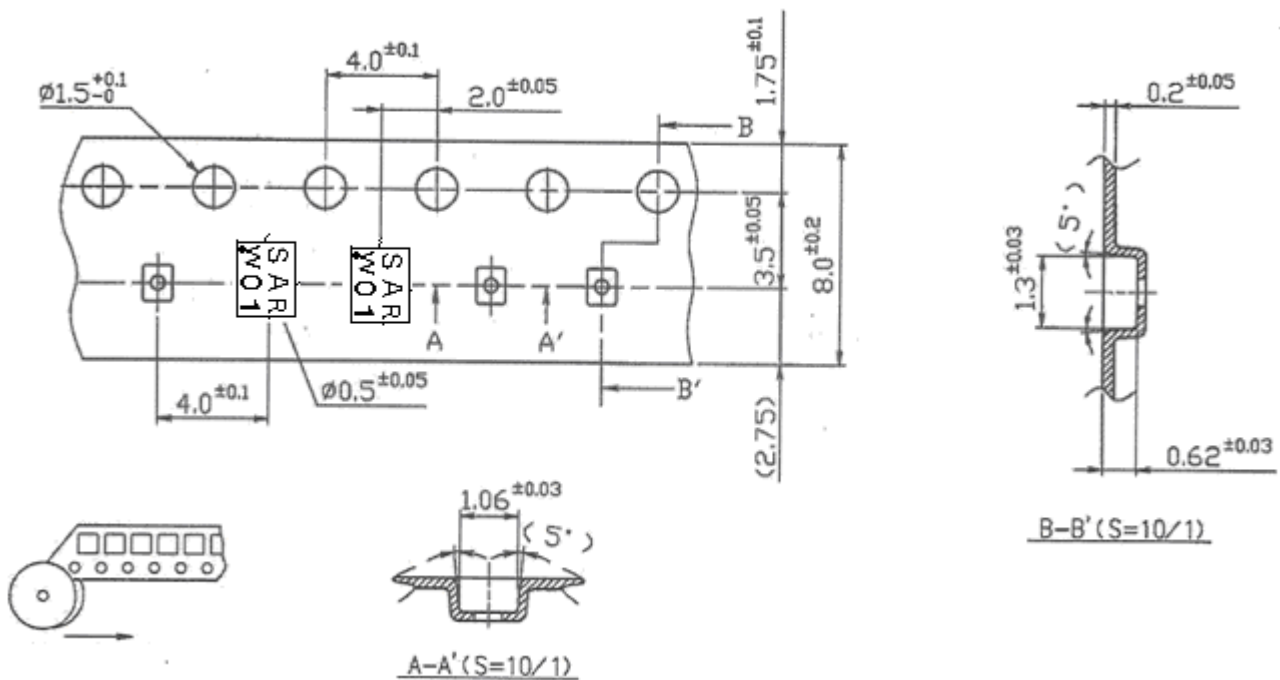
Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	▽	W	X	Y	Z

Reel Count  
7" = 5000  
13" = 10,000

# **PACKING:** REEL DIMENSION



## **TAPE DIMENSION**





### 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.

