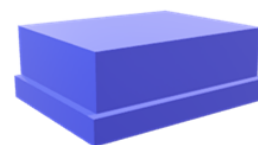


**SF2610LA**

**1960 MHz  
SAW Filter**



SM1109

## MAXIMUM RATING:

- Operating temperature range: -40 °C to +85 °C
- Storage temperature range: -55 °C to +125 °C
- Maximum Input Power: +10 dBm
- Maximum DC Voltage: +/-5 V
- Moisture Sensitivity Level: Level 1 (MSL 1)
- ESD 50V(MM) 100V(HBM)
- AEC-Q200 Qualified

## ELECTRICAL CHARACTERISTICS:

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

Terminating load impedance:  $Z_L = 50//4.7nH \Omega$  (Single-ended)

Parameters Description		Unit	Min.	Typ.	Max.
<b>Center Frequency</b> <b>Fc</b>		MHz	-	1960	-
<b>Insertion Loss(*1)</b> (1930~1990 MHz) <b>IL</b>		dB	-	2.8	4.0
<b>Amplitude Ripple</b> (1930~1990 MHz)		dB	-	1.3	2.7
<b>VSWR</b>	<b>Input</b> (1930~1990 MHz)	-	-	1.9	2.2
	<b>Output</b> (1930~1990 MHz)	-	-	2.0	2.3
<b>Attenuation</b> (Reference level from 0 dB)					
DC~960 MHz		dB	40	45	-
1558~1608 MHz		dB	35	40	-
1710~1850 MHz		dB	35	40	-
1850~1910 MHz		dB	35	39	-
2020~2070 MHz		dB	7	27	-
2070~2400 MHz		dB	25	33	-
2400~2500 MHz		dB	33	43	-
2500~3780 MHz		dB	28	40	-
3780~3980 MHz		dB	30	39	-
3980~5790 MHz		dB	21	31	-
5790~5970 MHz		dB	21	31	-
5970~7720 MHz		dB	21	31	-
7720~7960 MHz		dB	17	27	-
7960~8000 MHz		dB	17	27	-

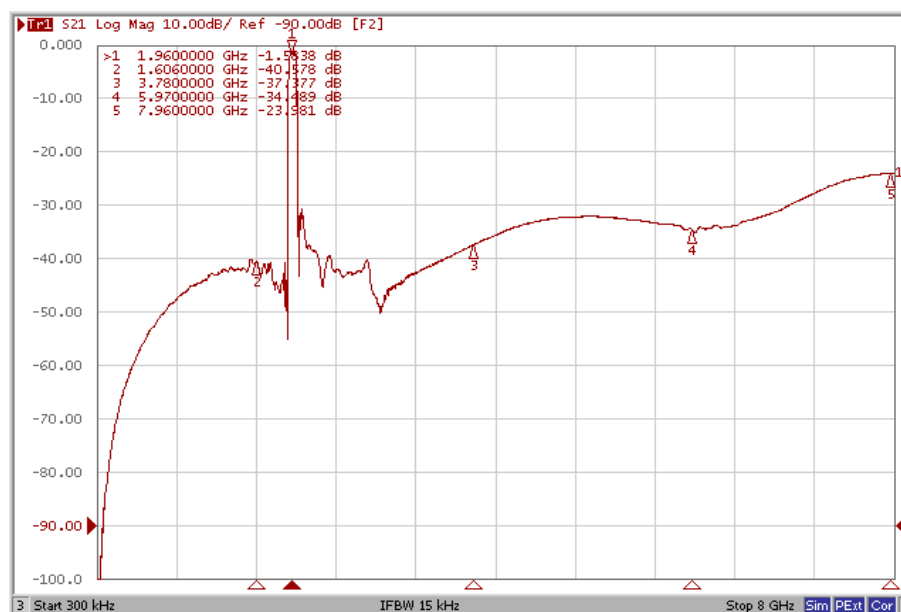
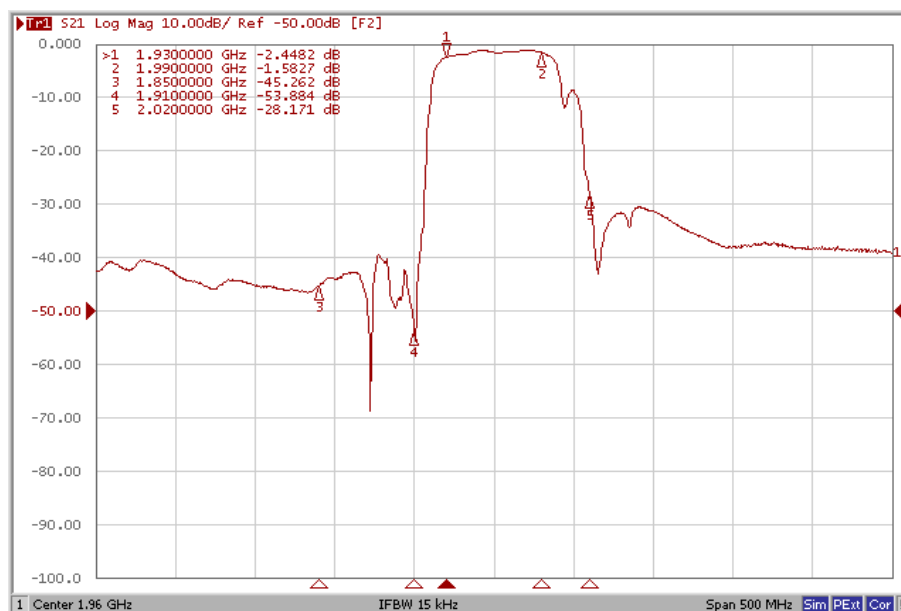
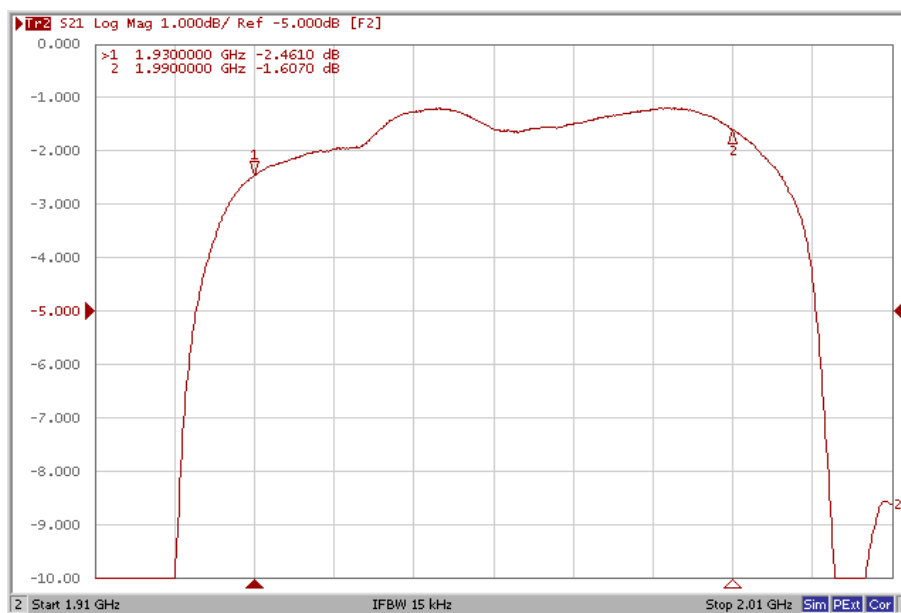
(\*1) Specification of insertion loss excludes loss that comes from the test board.



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

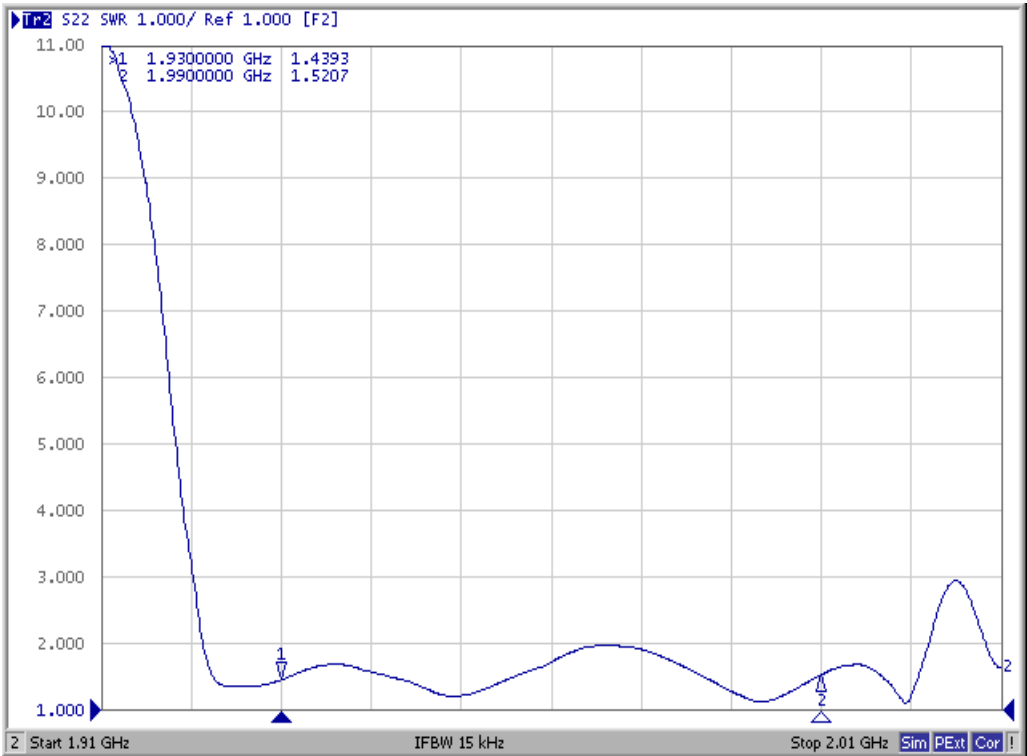
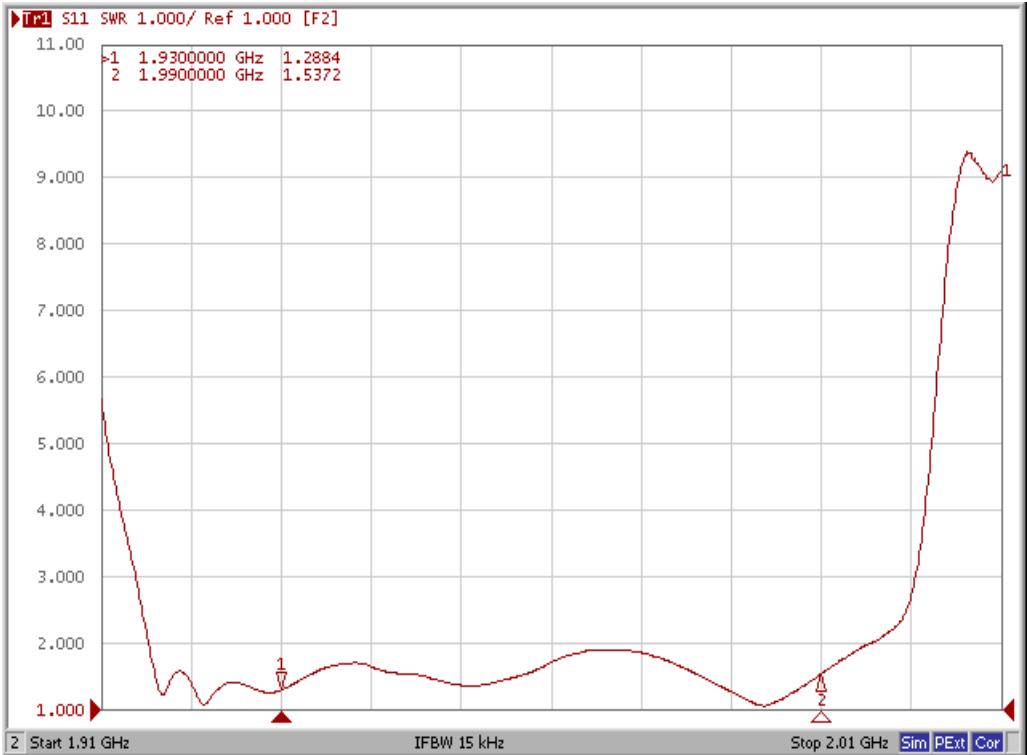
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

## FREQUENCY CHARACTERISTICS

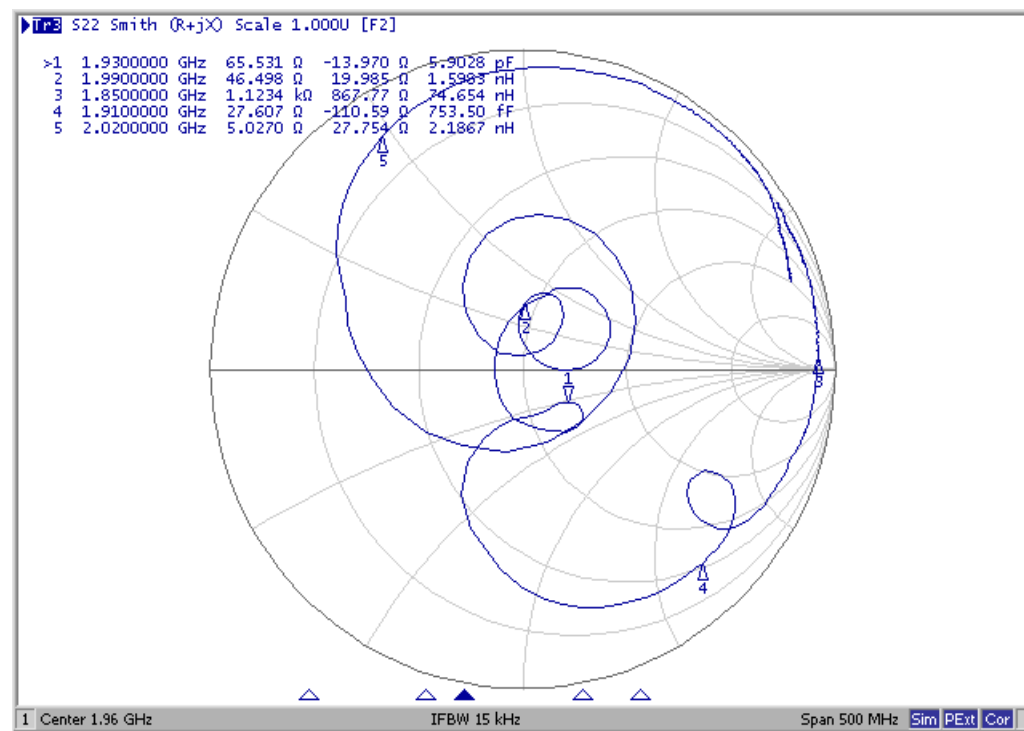
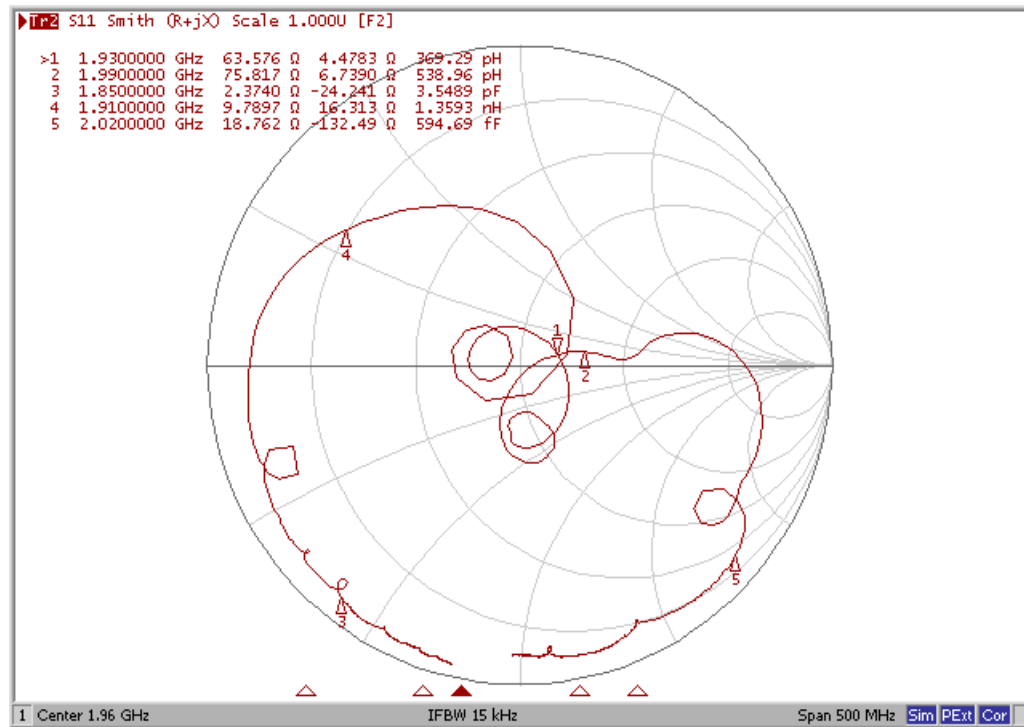


Reflection Functions:

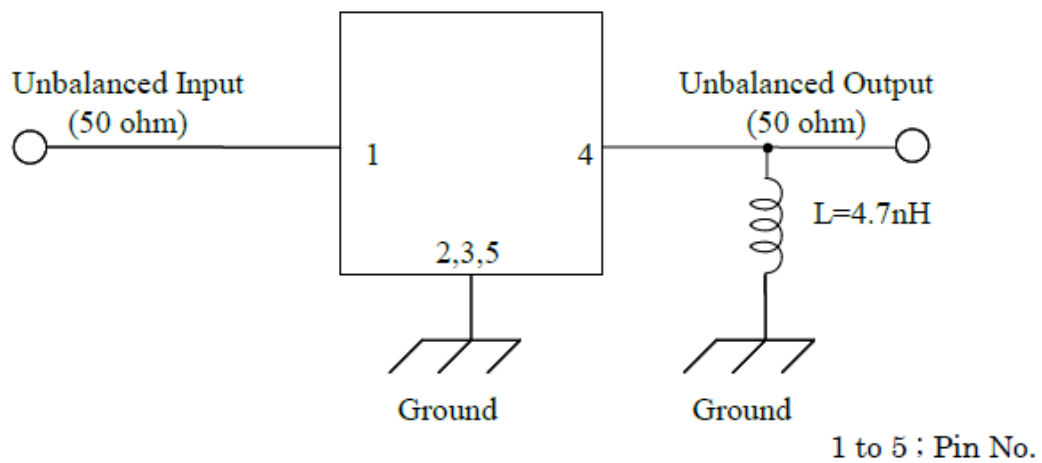
VSWR



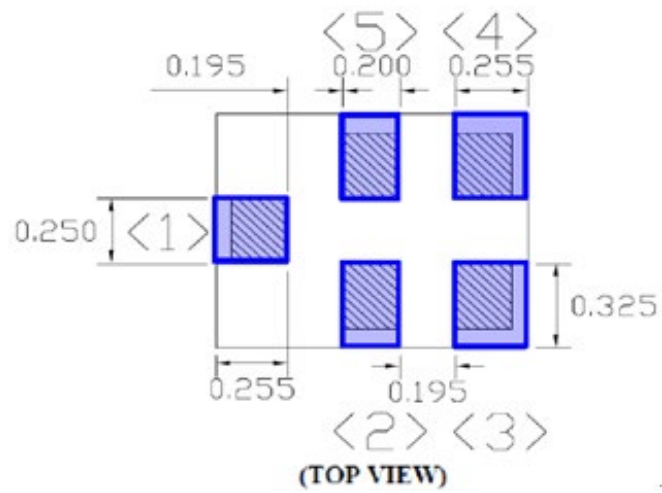
## Smith Chart



## MEASUREMENT CIRCUIT

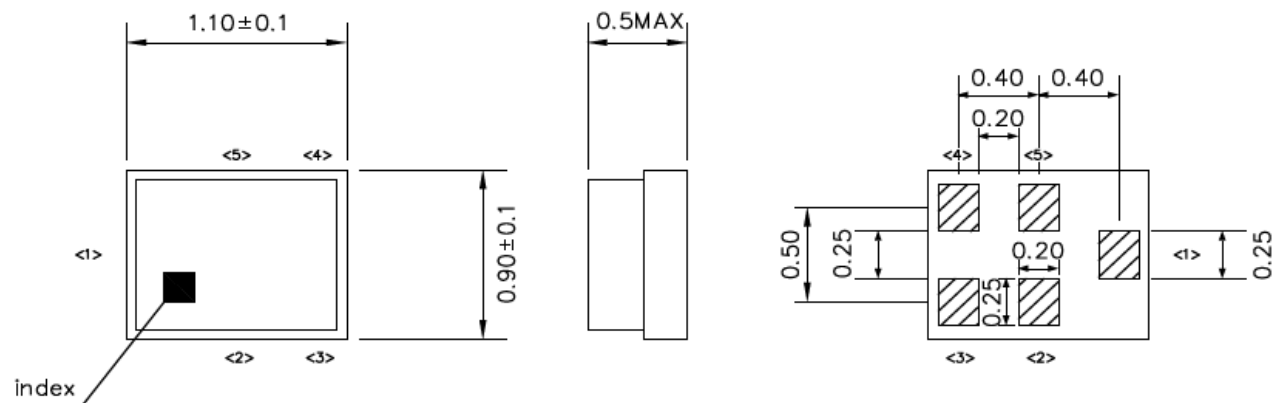


## PCB Footprint



## OUTLINE DRAWING

Device size: 1.1typ. x 0.9typ. x 0.5max.

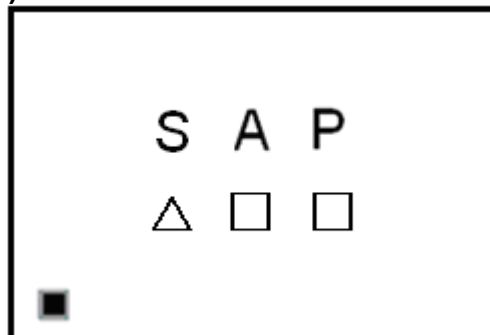


Unit : mm

## 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 (Mass Production):



△ : Date Code

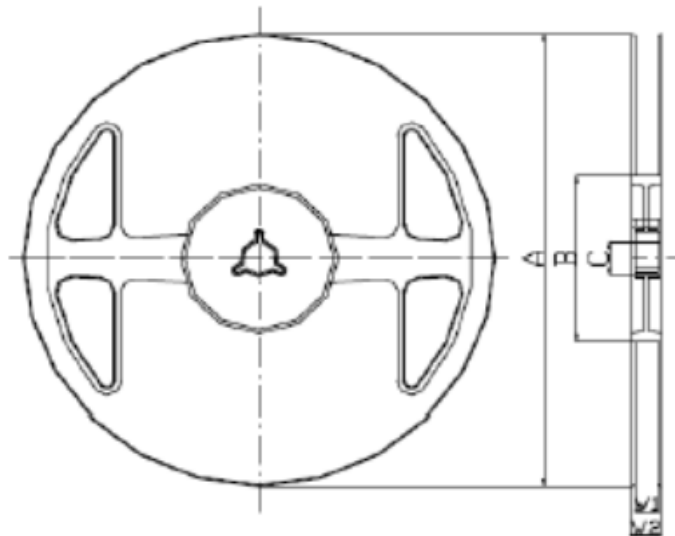
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
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
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

## PACKING: DIMENSION

Reel Count:  
7" = 3000  
13" = 10,000



### Materials of Reel

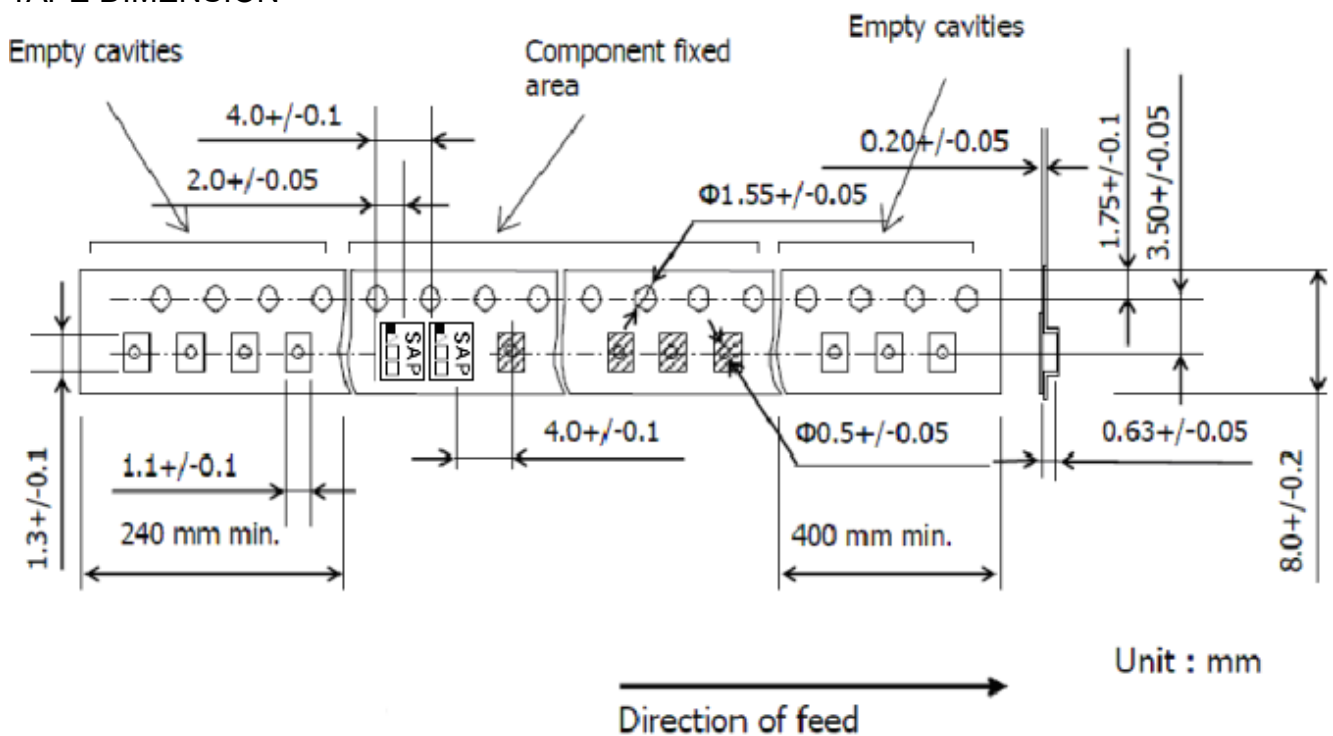
Material : Polystyrene + Carbon

Color : Black

Surface resistance (reference value) :  $10^9 \Omega/\text{sq}$  Max.

Unit : mm

## 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.

