RFMi
BRAND OF AKOUSTIS

RoHS compliant

SF2550LA

897.5 MHz SAW Filter

SM1109

MAXIMUM RATING:

- Maximum Input Power: 13 dBm
- DC voltage: 0 V
- Operating Temperature: -40 °C to +85 °C
- Storage Temperature: -40 °C to +85 °C
- Moisture Sensitivity Level: Level 1 (MSL 1)
- ESD: 100 V(MM), 200 V(HBM)
- AEC-Q200 Qualified

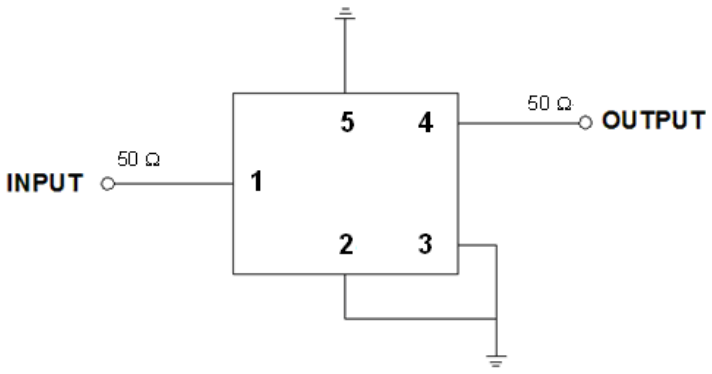
ELECTRICAL CHARACTERISTICS:

Terminating source impedance: Zs = 50 Ω (Single-ended)

Terminating load impedance: Z_L = 50 Ω (Single-ended)

Parameters Description	Unit	Min.	Typ.	Max.
Center Frequency **Fc**	MHz	-	897.5	-
Insertion Loss (880.4~914.6 MHz) **IL**	dB	-	2.3	2.9
Amplitude Ripple (880.4~914.6 MHz)	dB_{p-p}	-	0.8	1.7
VSWR (880.4~914.6 MHz)	-	-	2.1	2.5
Attenuation (Reference level from 0 dB)				
DC ~ 860 MHz	dB	30	50	-
860 ~ 870 MHz	dB	18	28	-
925.4 ~ 935 MHz	dB	8	18	-
935 ~ 959.4 MHz	dB	24	28	-
1760 ~ 1830 MHz	dB	34	44	-
2640 ~ 2745 MHz	dB	30	39	-

MEASUREMENT CIRCUIT:

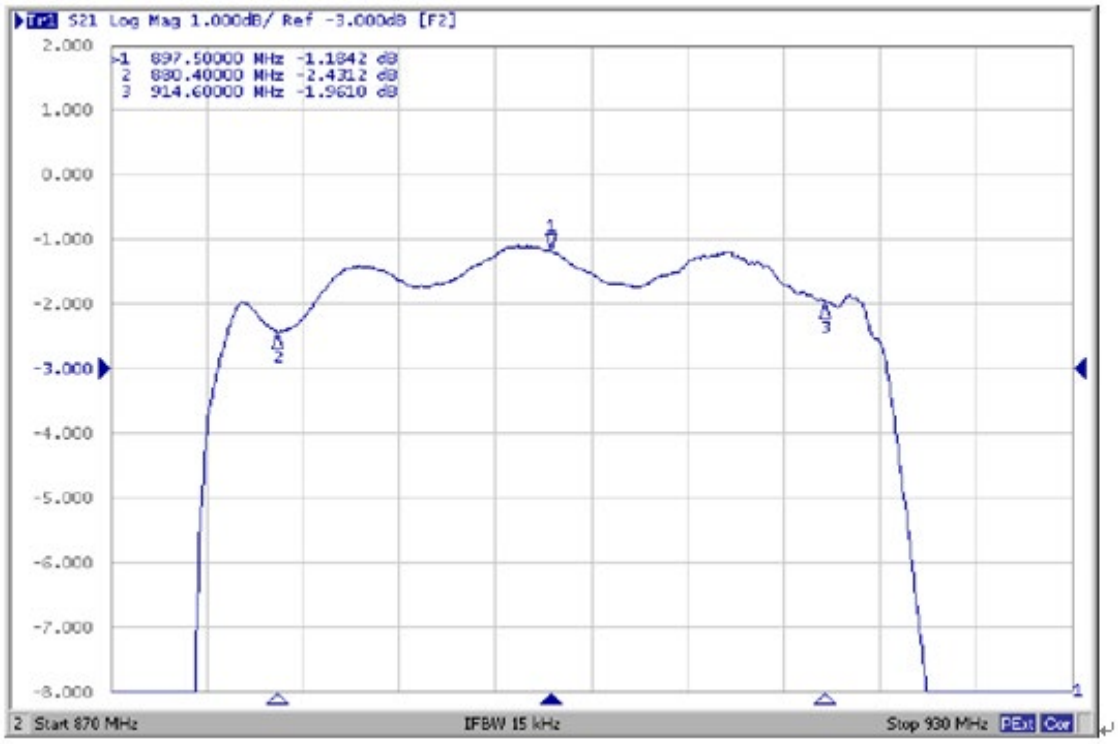


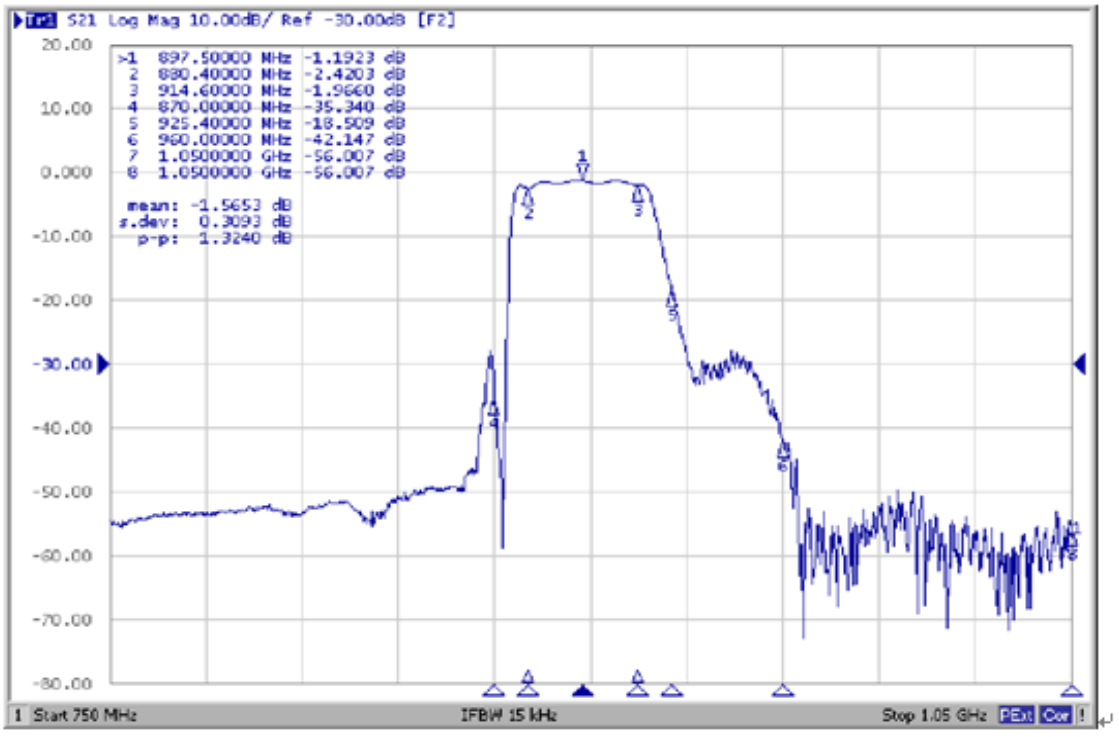
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

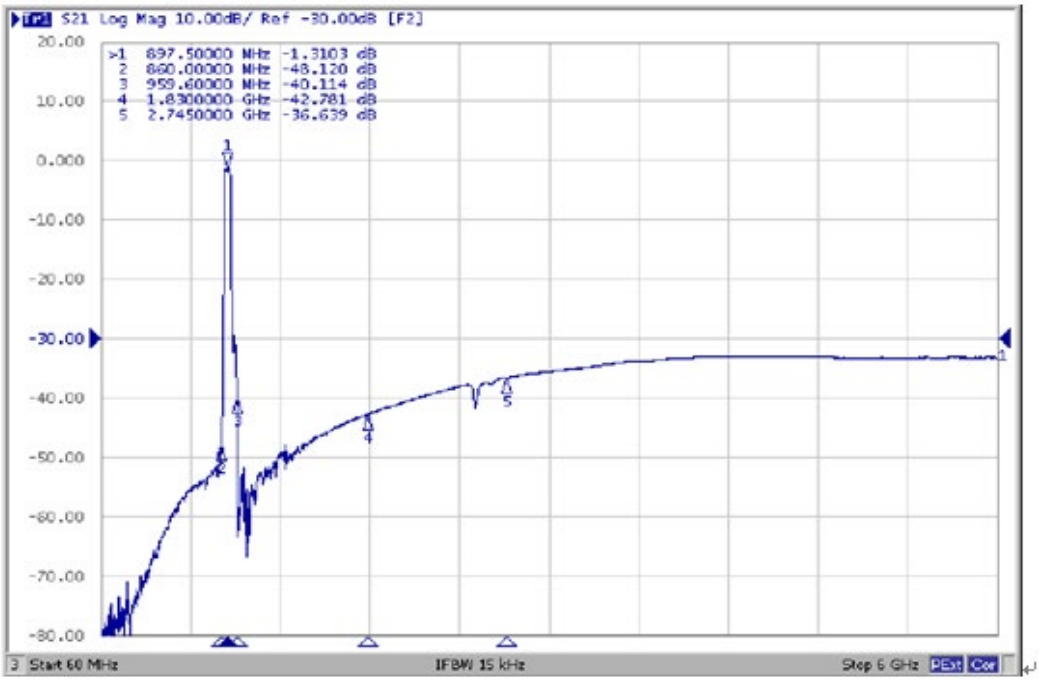
NOTES:

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

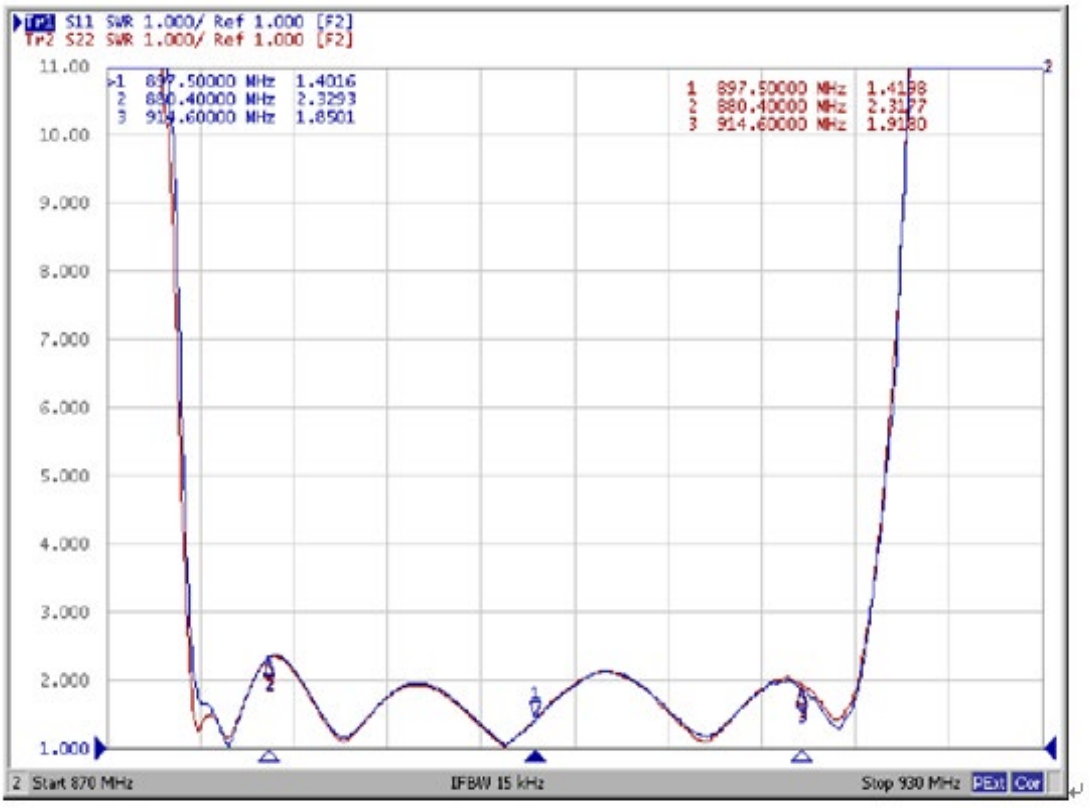




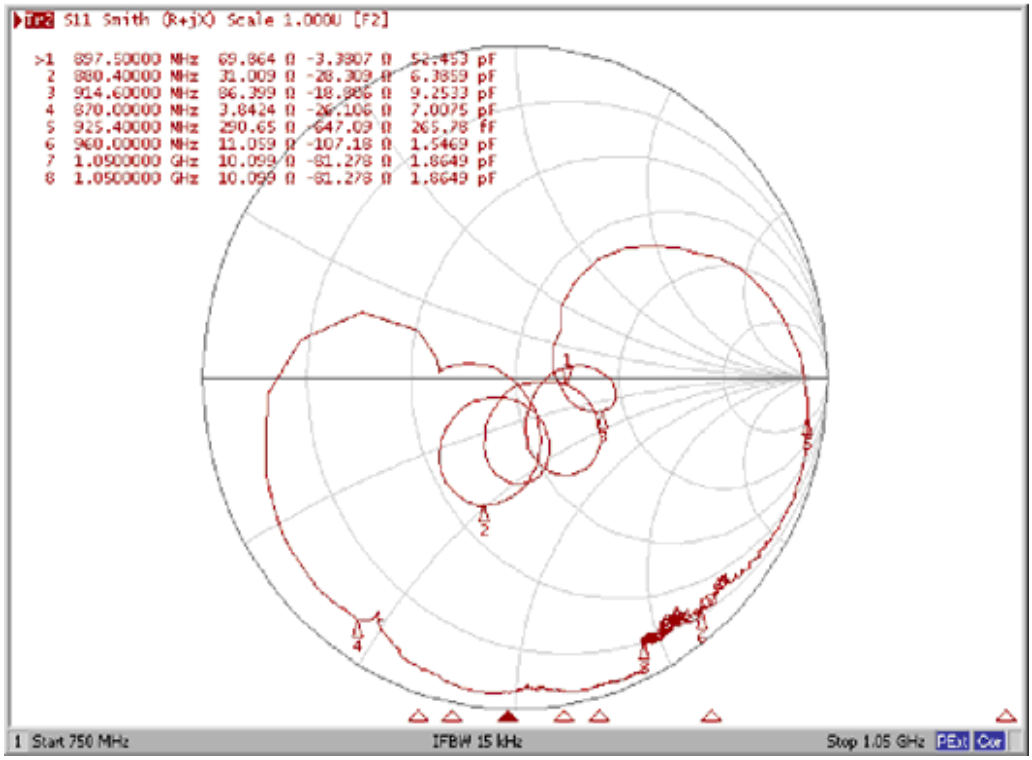


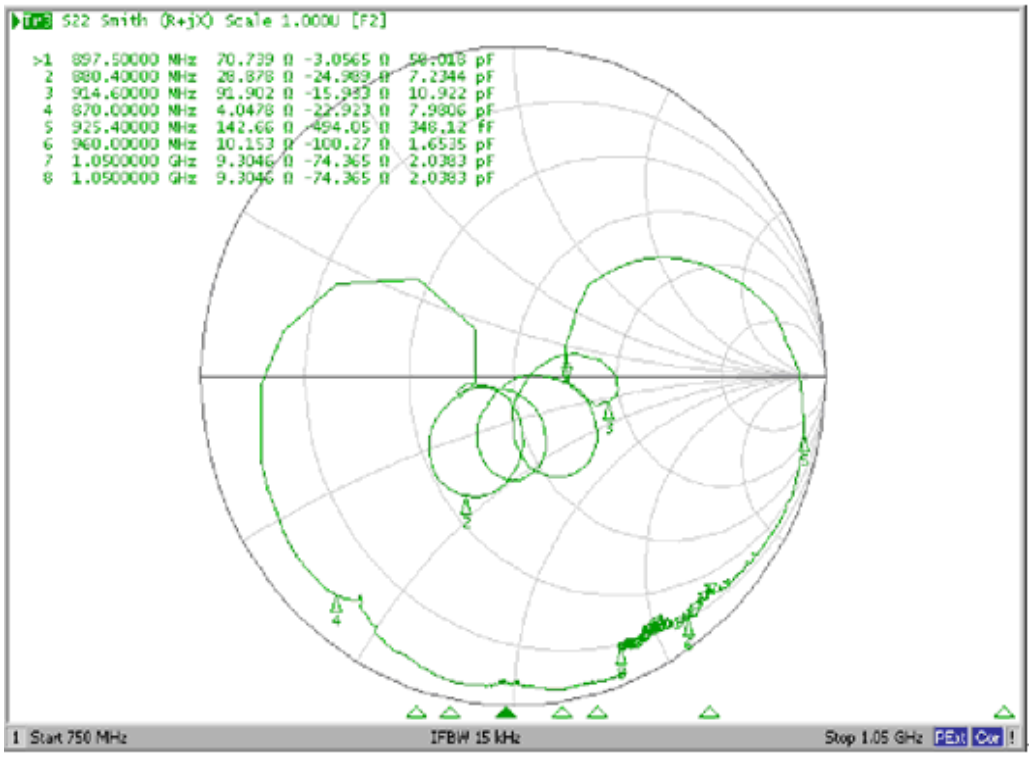
Reflection Functions:

VSWR

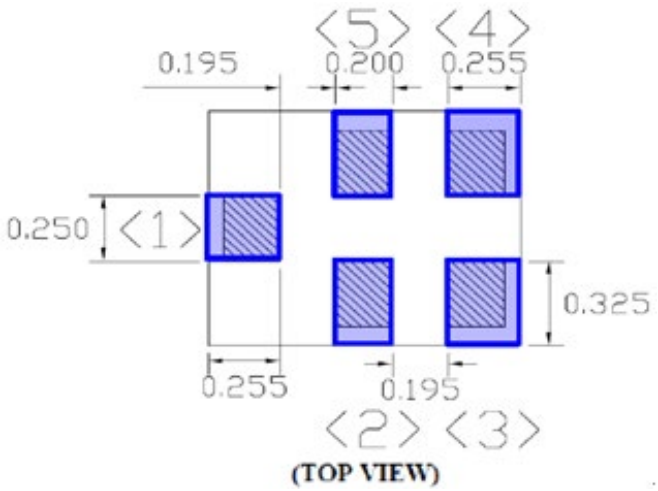


Smith Chart

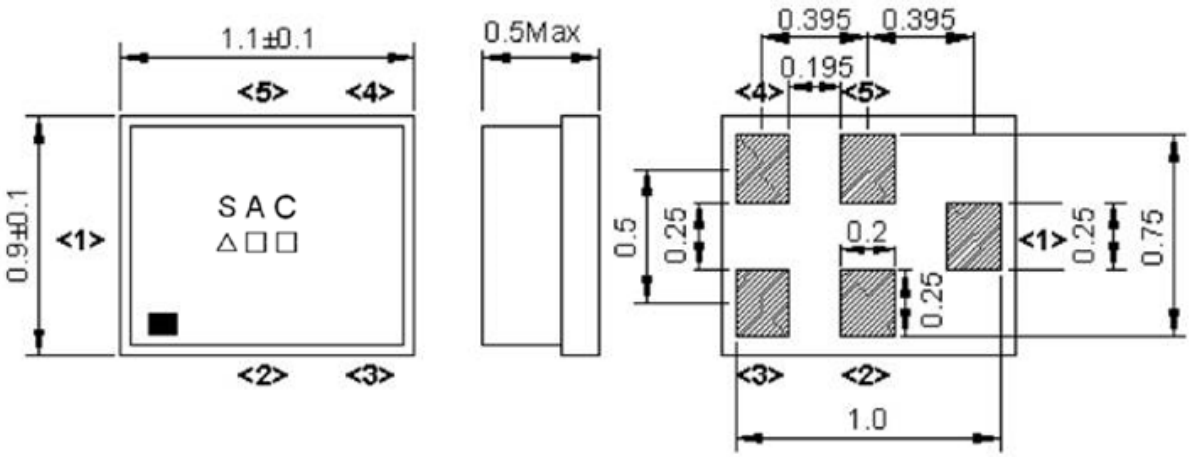




PCB Footprint



OUTLINE DRAWING (Mass Production)



Not Specified Tolerance : +/-0.1 mm

Pin Configuration

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

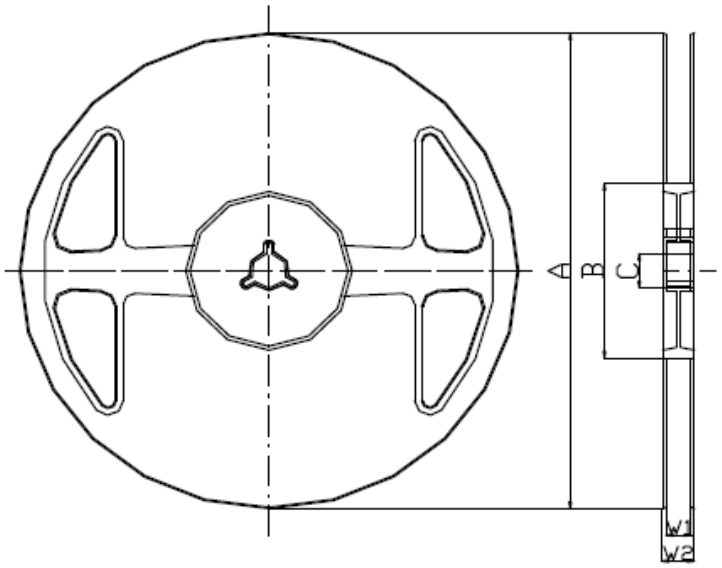
△ : Date Code

□ : 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	N	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:

REEL DIMENSION



Materials of Reel

Material : Polvstvrene + Carbon

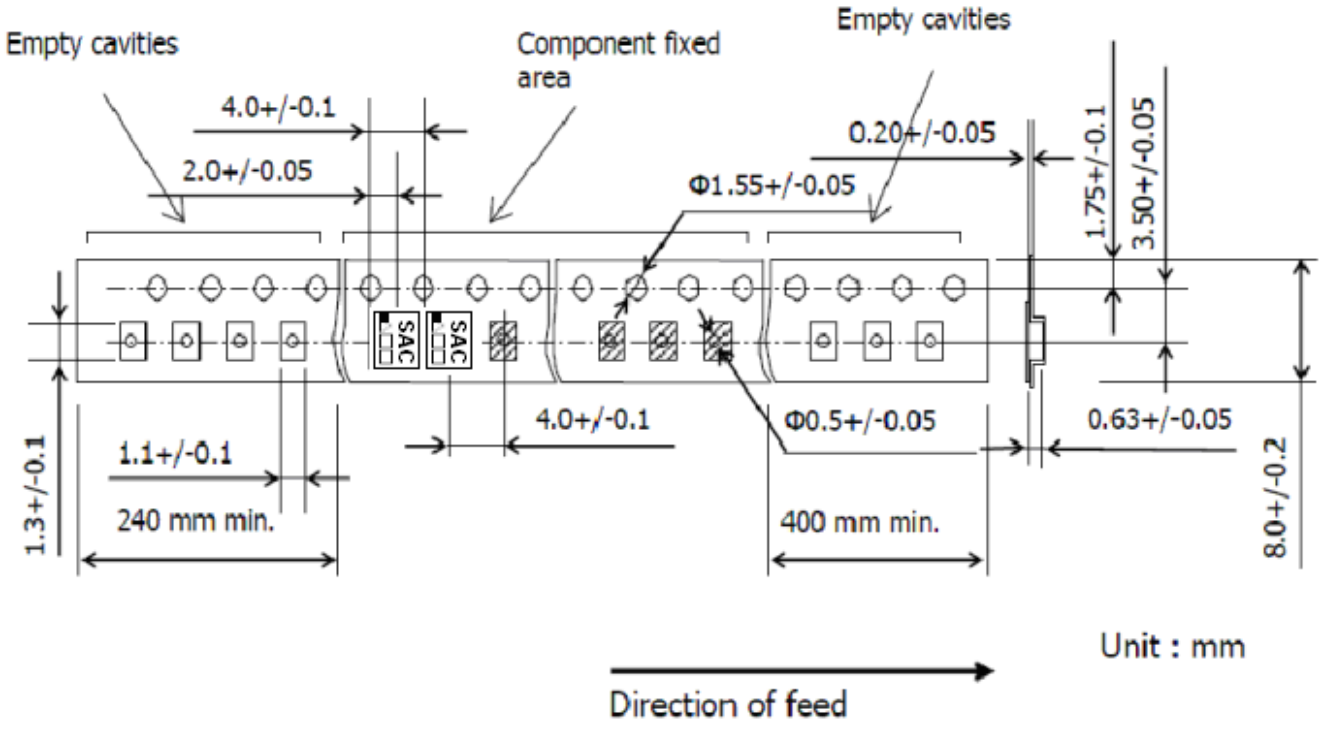
Color : Black

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

Unit : mm

Code	Quantity	A	B	C	W1	W2
J	5,000 pcs	ϕ 180.0 +0.0/-1.5	ϕ 66.0 +/-0.5	ϕ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

TAPE DIMENSION



Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.