

SF2556LA

**782 MHz
SAW Filter**



SM1109

MAXIMUM RATING:

- Maximum Input Power: 15 dBm
- DC voltage: 3 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: $Z_s = 50 \Omega$ (Single-ended)

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

Parameters Description	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	782	-
Insertion Loss (777~787 MHz) IL	dB	-	1.5	2.3
Amplitude Ripple (777~787 MHz)	dB _{p-p}	-	0.5	1.1
VSWR (777~787 MHz)	-	-	1.7	2.1
Attenuation (Reference level from 0 dB)				
DC ~ 716 MHz	dB	45	59	-
716 ~ 728 MHz	dB	45	57	-
728 ~ 746 MHz	dB	45	57	-
746 ~ 756 MHz	dB	44	56	-
808 ~ 818 MHz	dB	23	31	-
869 ~ 894 MHz	dB	40	55	-
1554 ~ 1565 MHz	dB	35	48	-
1565 ~ 1585 MHz	dB	35	48	-
1597 ~ 1607 MHz	dB	35	47	-
1805 ~ 1880 MHz	dB	30	45	-
1930 ~ 1990 MHz	dB	30	44	-
2110 ~ 2170 MHz	dB	30	43	-
2331 ~ 2361 MHz	dB	29	42	-
2400 ~ 2484 MHz	dB	27	42	-
2484 ~ 3000 MHz	dB	25	39	-
3000 ~ 4000 MHz	dB	21	39	-
4000 ~ 5000 MHz	dB	15	36	-
5000 ~ 6000 MHz	dB	15	36	-

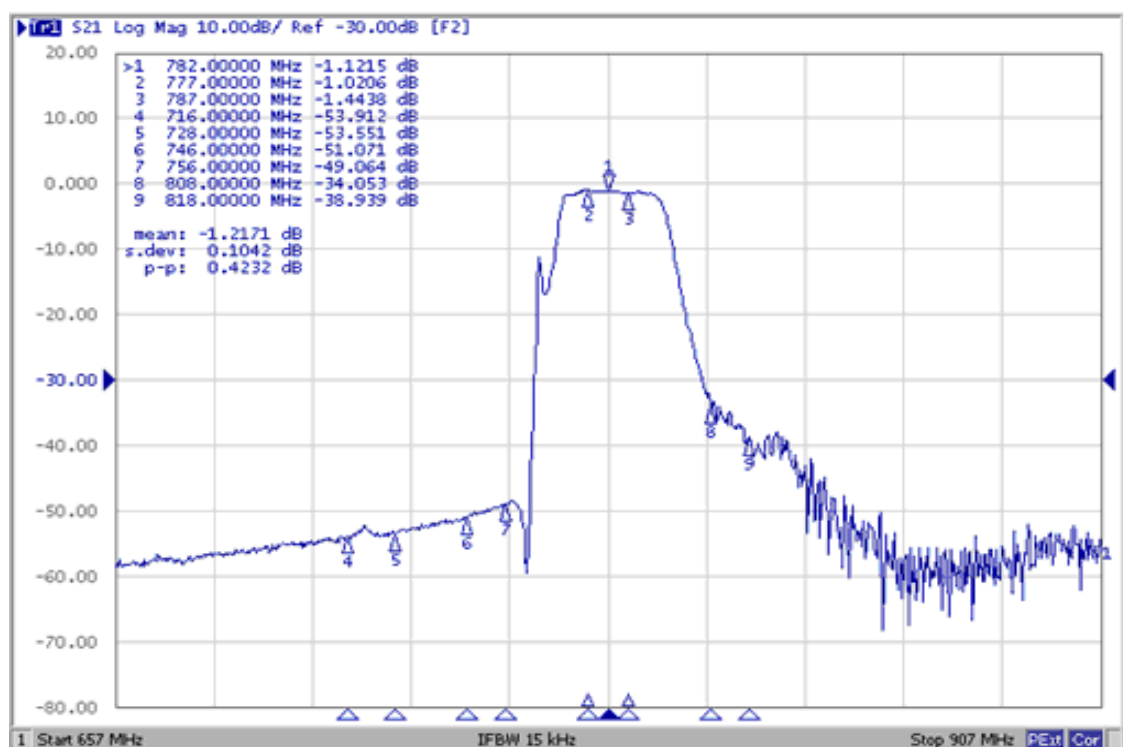
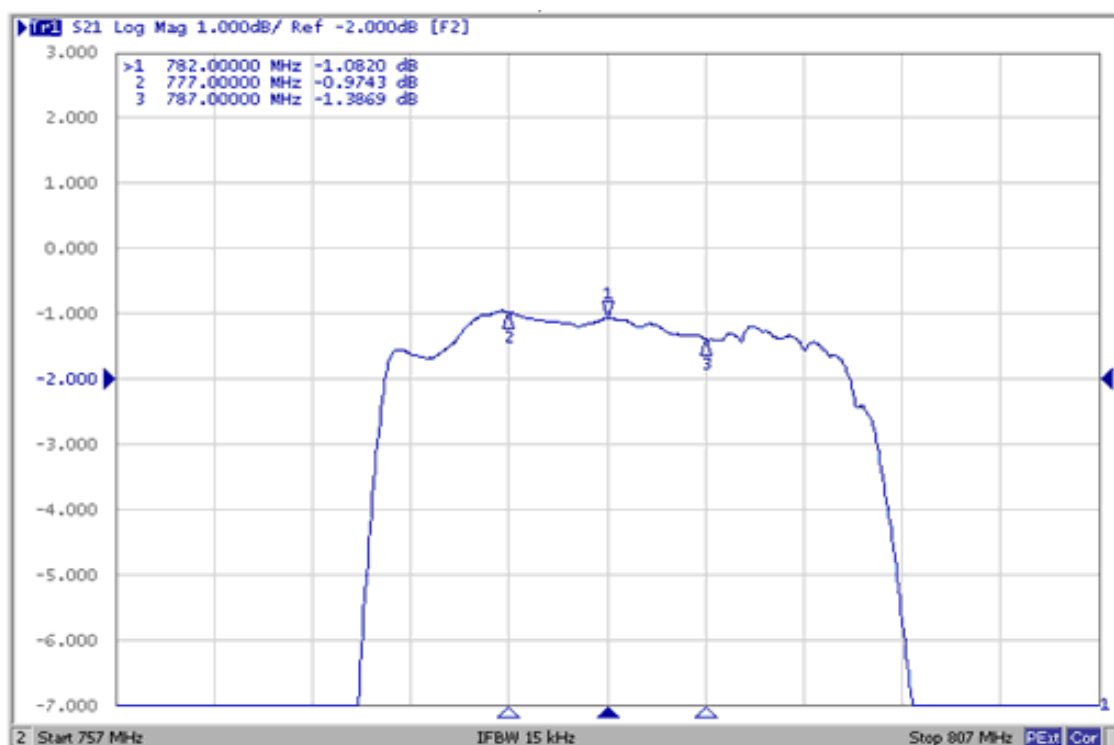


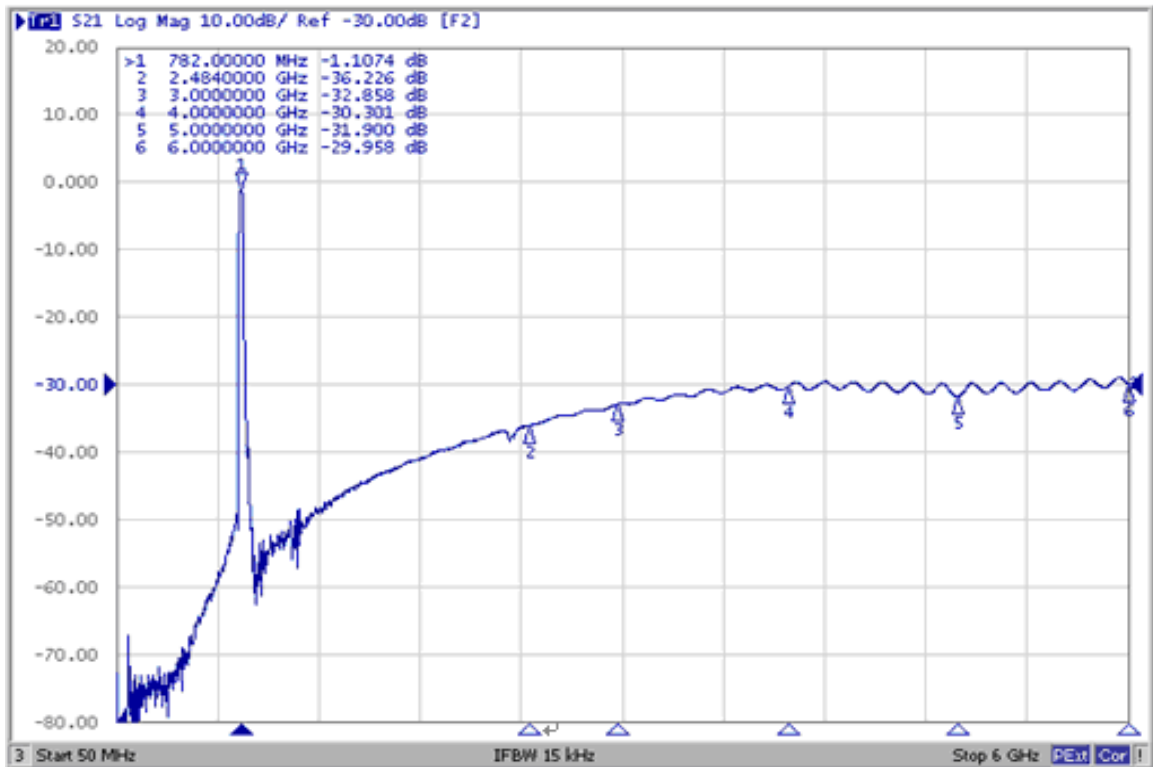
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

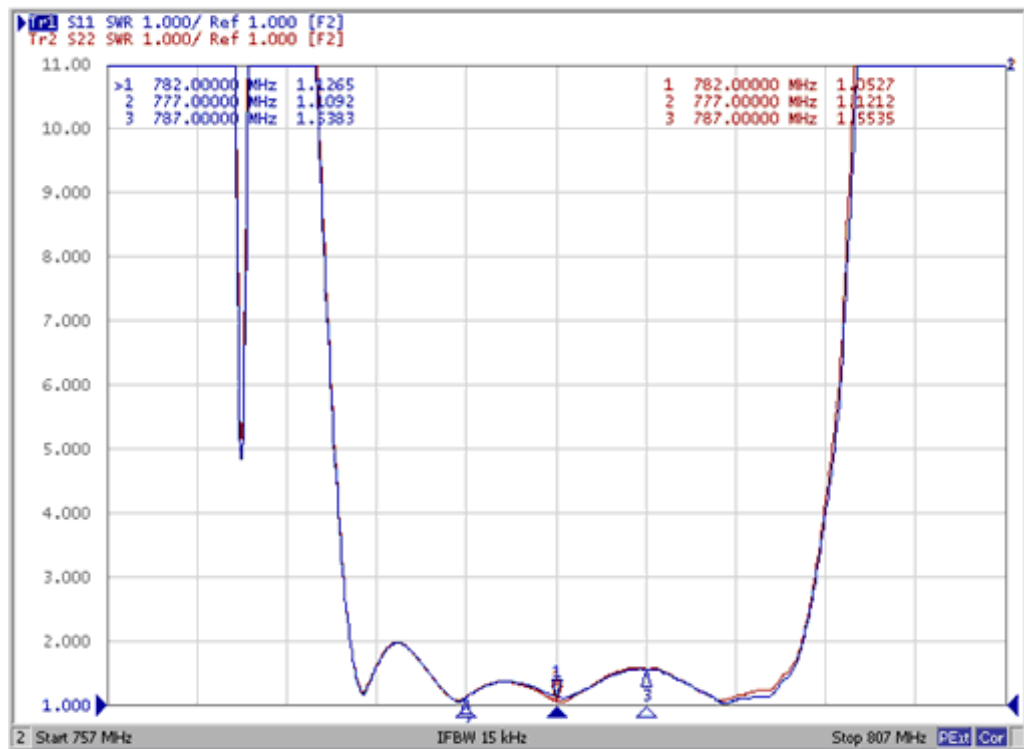
FREQUENCY CHARACTERISTIC



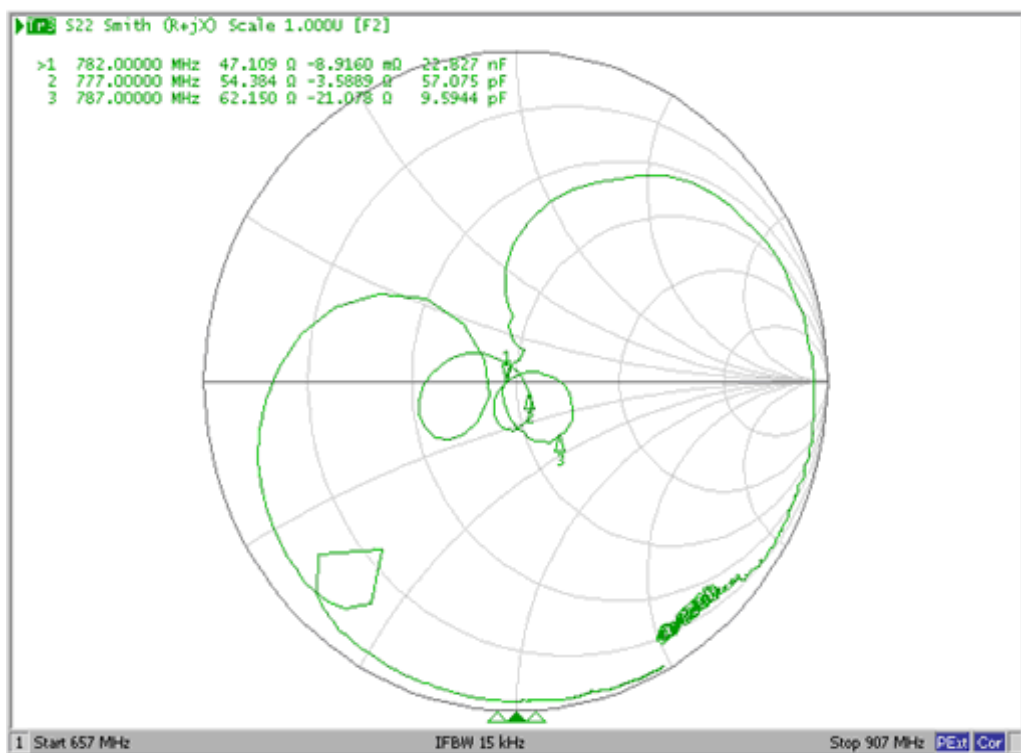
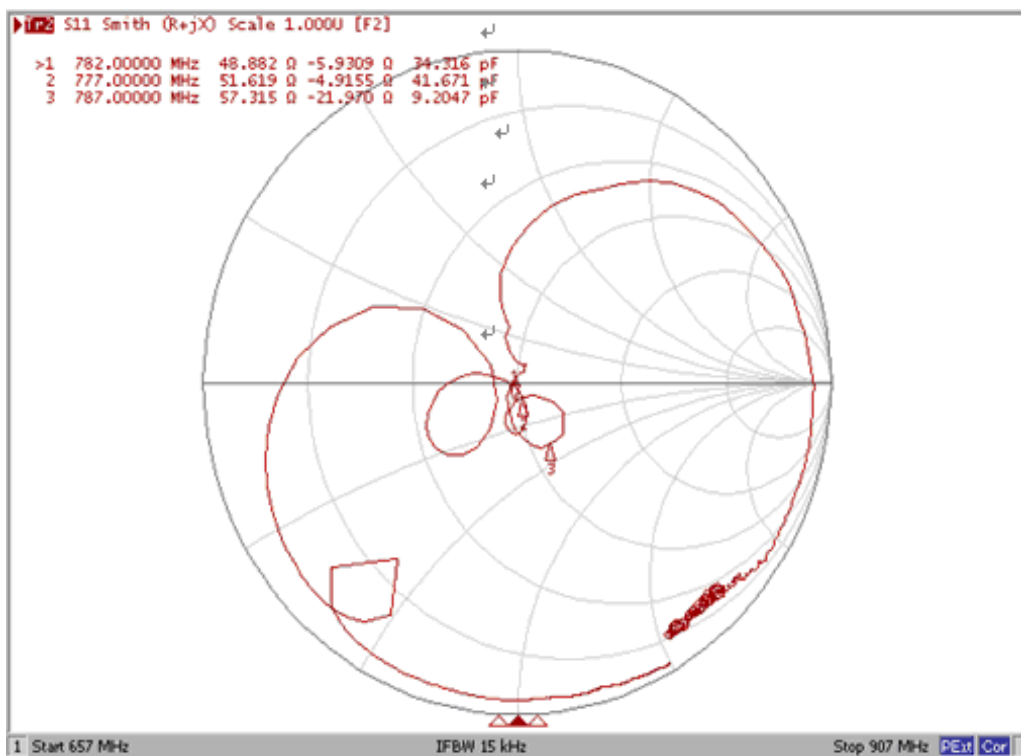


Reflection Functions

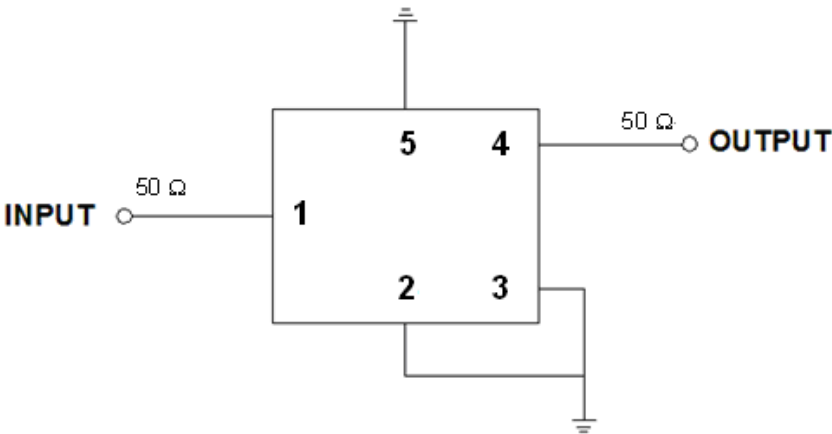
VSWR



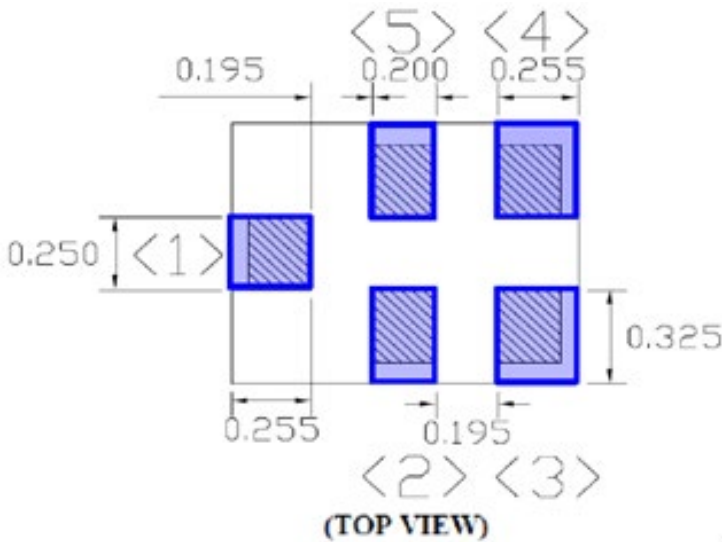
Smith Chart



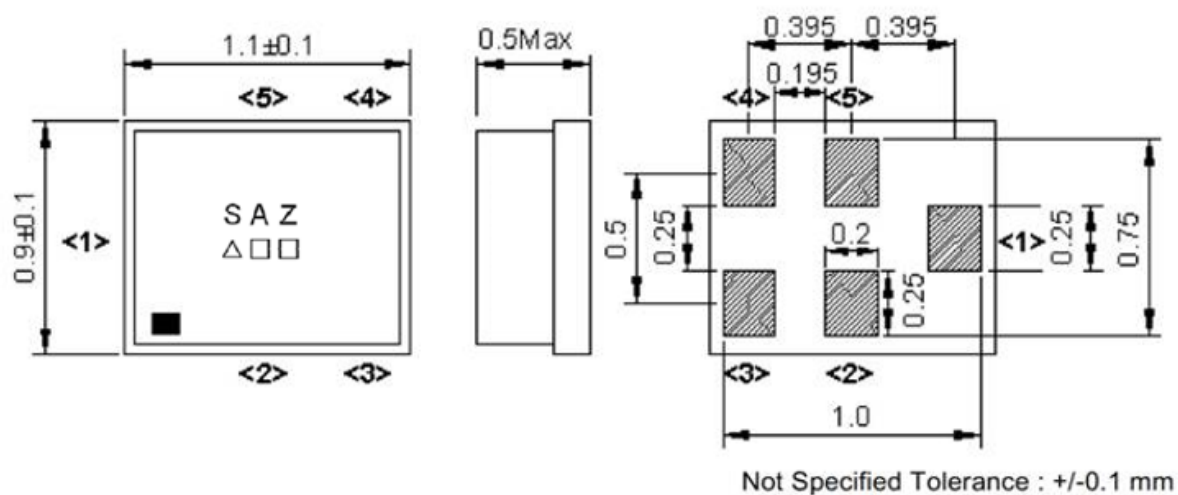
MEASUREMENT CIRCUIT



PCB Footprint



OUTLINE DRAWING (Mass Production)



Pin Configuration

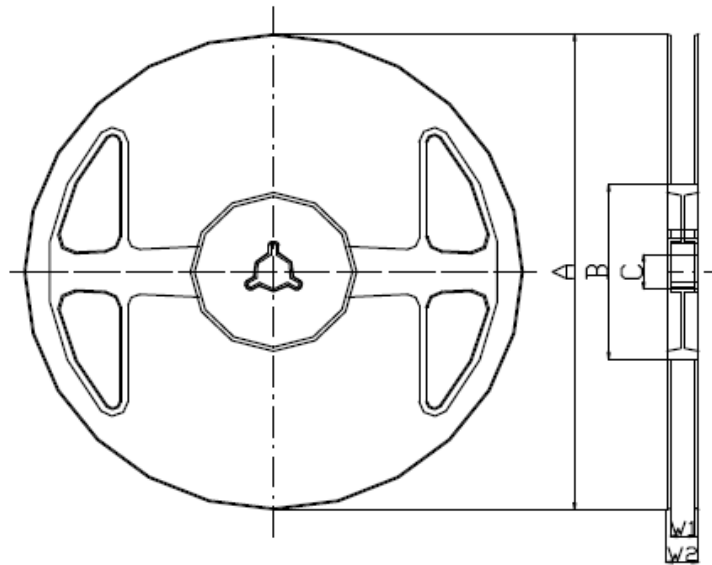
Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

△ : 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
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
2021	A	B	C	D	E	F	G	H	J	K	L	M

REEL DIMENSION



Materials of Reel

Material : Polystyrene + Carbon

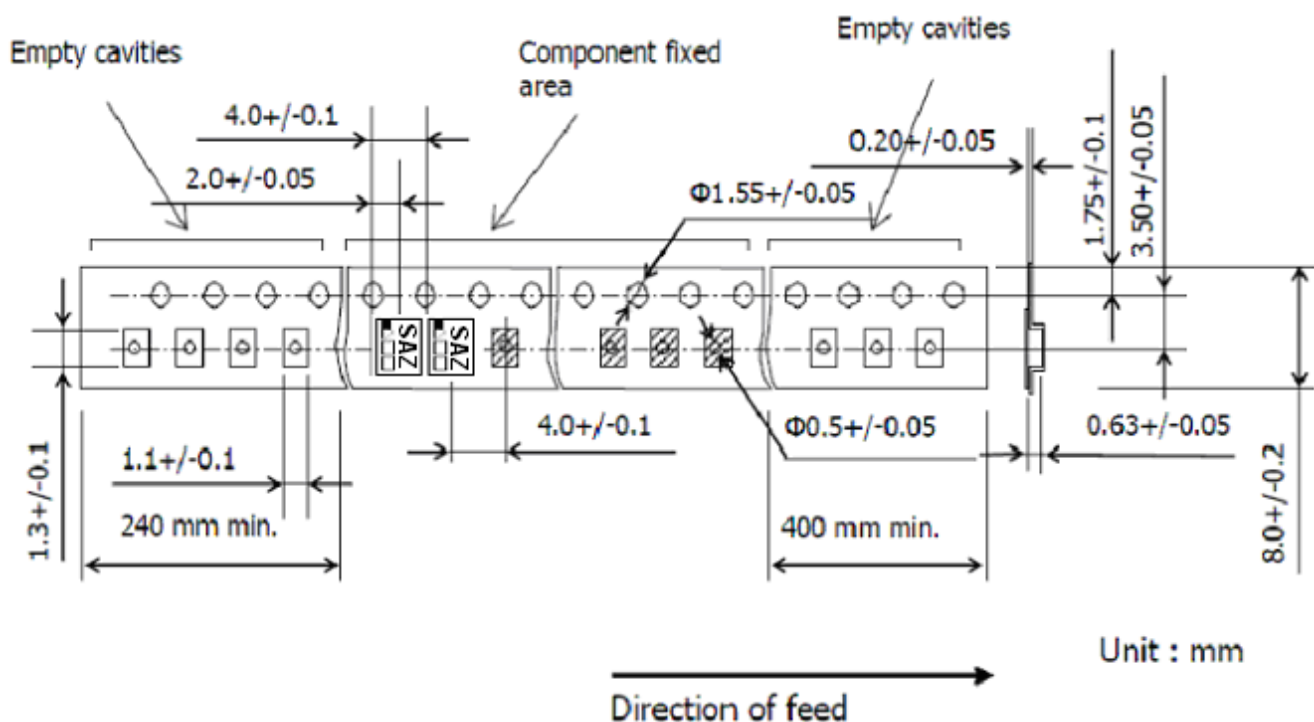
Color : Black

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

