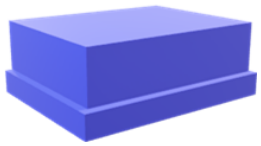
RFMi
BRAND OF AKOUSTIS

RoHS compliant

SF2613LM

1880 MHz SAW Filter



SM1109

MAXIMUM RATING:

- Input Power Level: 10 dBm (in passband)
- DC Voltage : +/-5 V
- Operating Temperature: -30 °C to +85 °C
- Storage Temperature: -40 °C to +100 °C
- Moisture Sensitive Level: Level 1 (MSL1)
- ESD: 50 V(MM), 100 V(HBM)

ELECTRICAL CHARACTERISTICS:

Terminating source impedance: Zs = 50 Ω

Terminating load impedance: Z_L = 50//10nH Ω

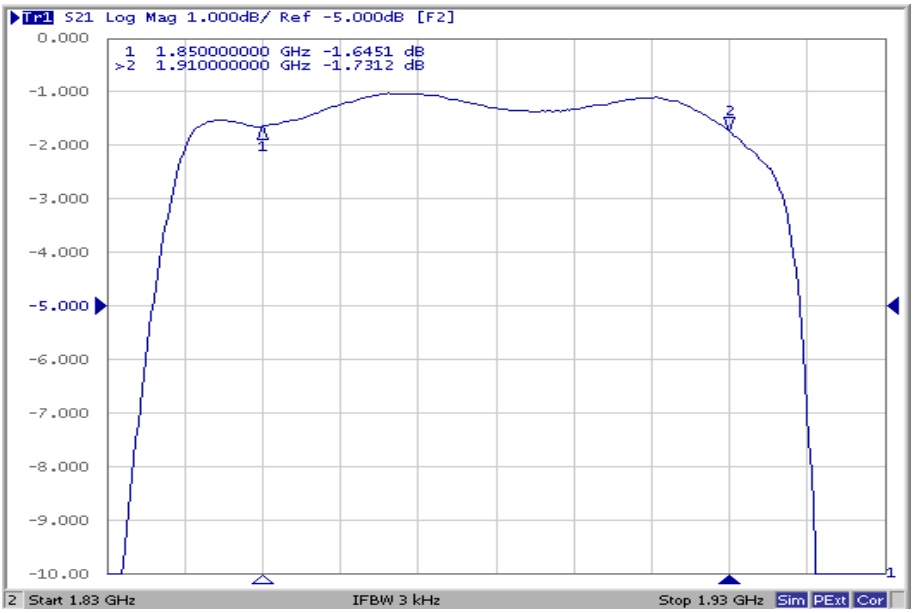
Item		Unit	Min.	Typ.	Max.	Remark
Center Frequency	**Fc**	MHz	-	1880	-	-
Insertion Loss (1850~1910 MHz)	**IL**	dB(*1)	-	1.7	2.0	at 25 °C
		dB(*1)	-	-	2.8	-
Amplitude Ripple (1850~1910 MHz)		dB	-	0.7	1.1	at 25 °C
		dB	-	-	1.9	-
VSWR (1850~1910 MHz)		-	-	1.8	2.2	-
Attenuation (Reference level from 0 dB)						
DC ~ 1570 MHz		dB	20	32	-	-
1570 ~ 1580 MHz		dB	20	34	-	-
1930 ~ 1990 MHz		dB	17	20	-	-
1990 ~ 2400 MHz		dB	20	26	-	-
2400 ~ 3000 MHz		dB	20	31	-	-
3000 ~ 4000 MHz		dB	15	30	-	-
4000 ~ 5550 MHz		dB	10	24	-	-
5550 ~ 5730 MHz		dB	10	24	-	-
5730 ~ 6000 MHz		dB	10	23		-

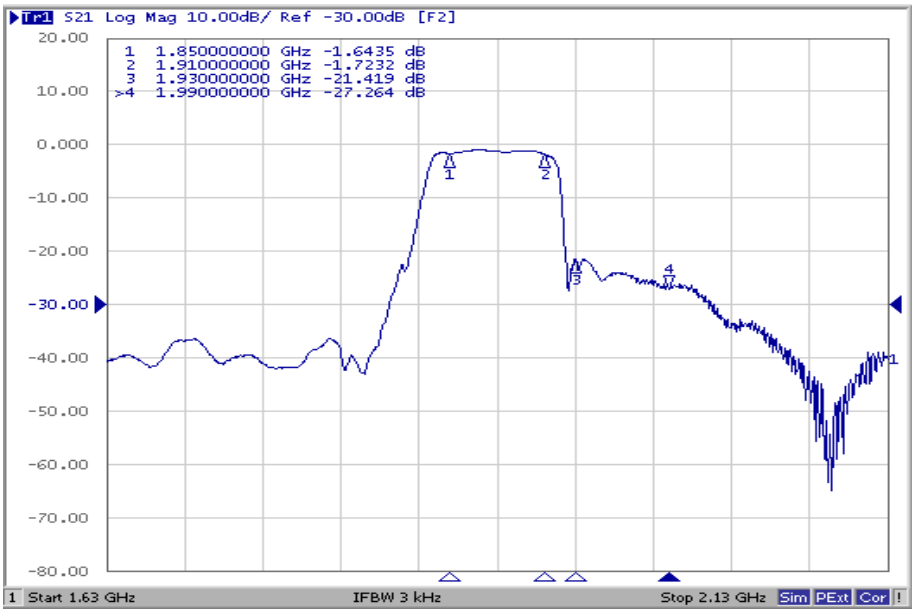
(*1)Specification of insertion loss includes loss that comes from test board. (Approximately 0.15 dB)

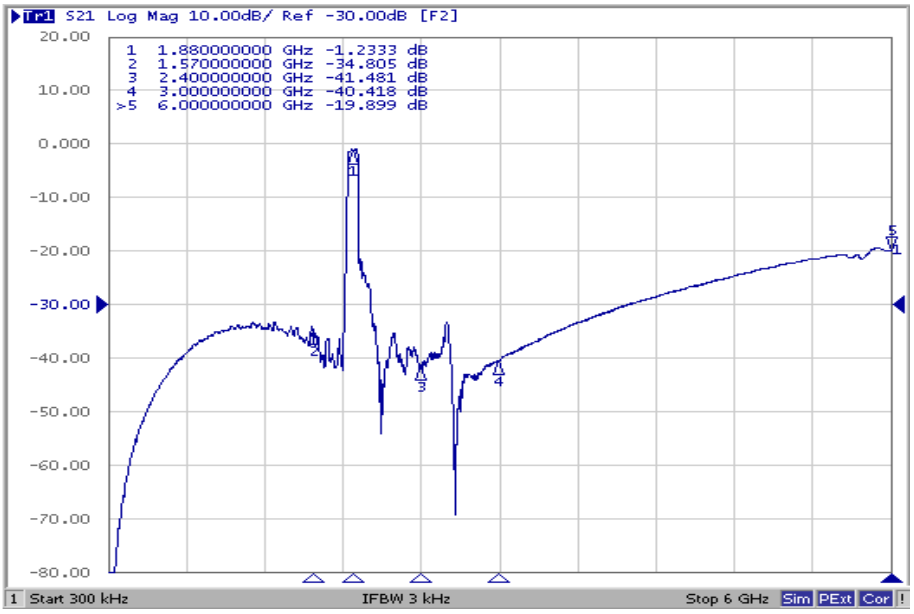
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. :

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:

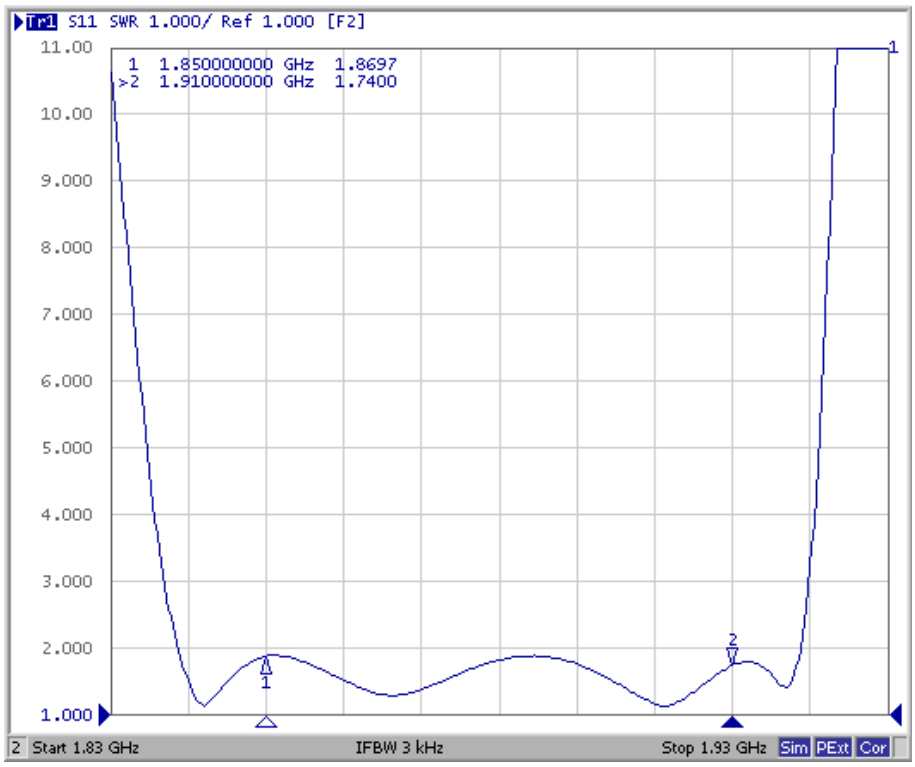


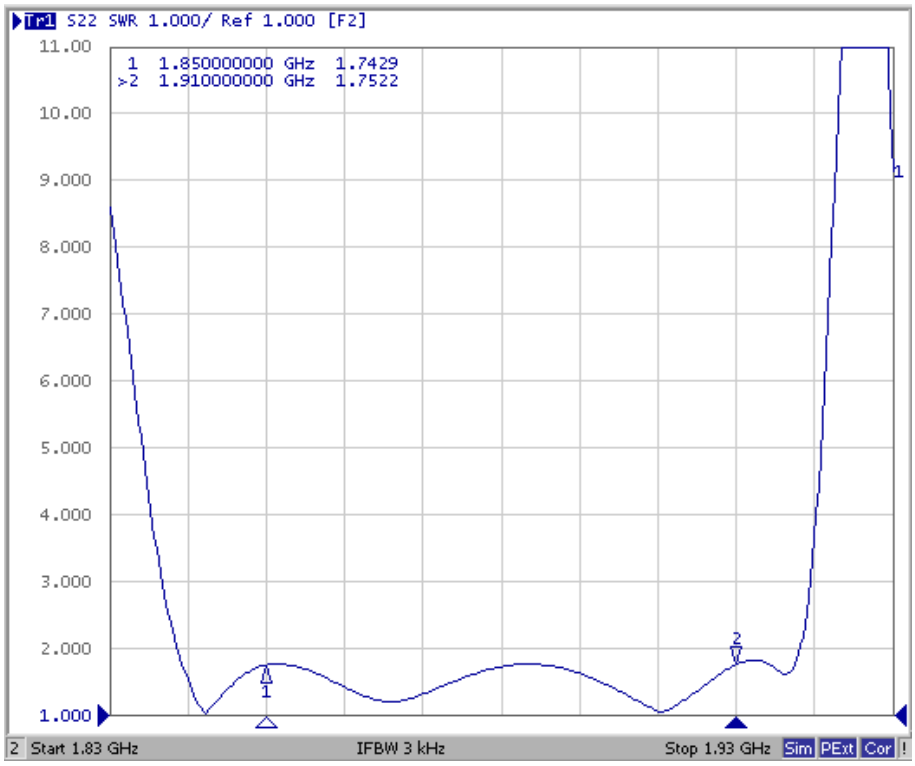




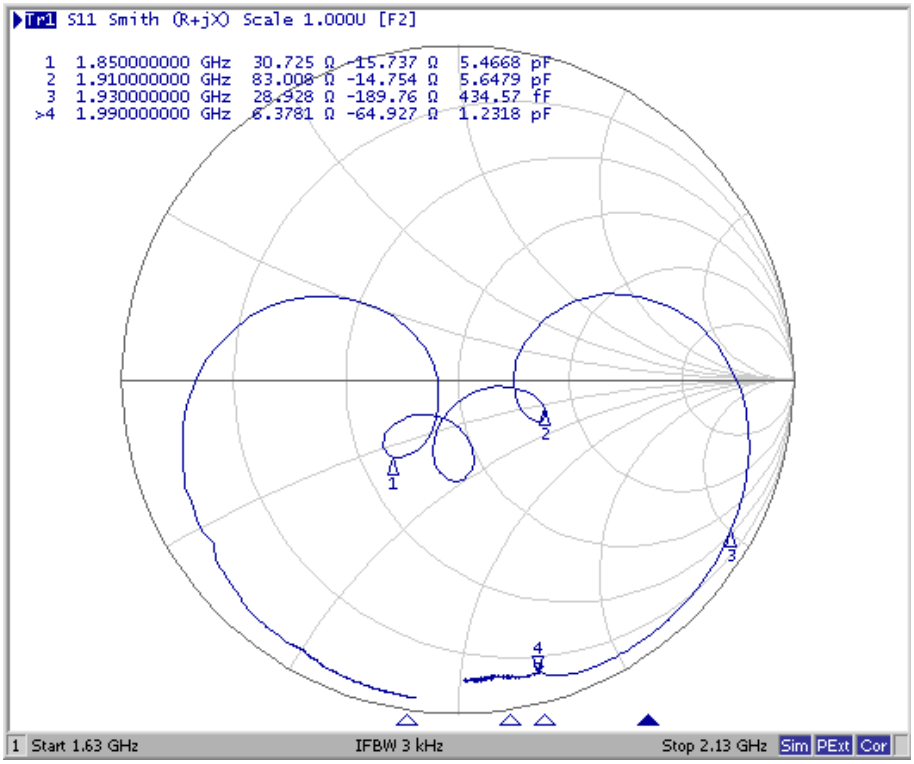
Reflection Functions:

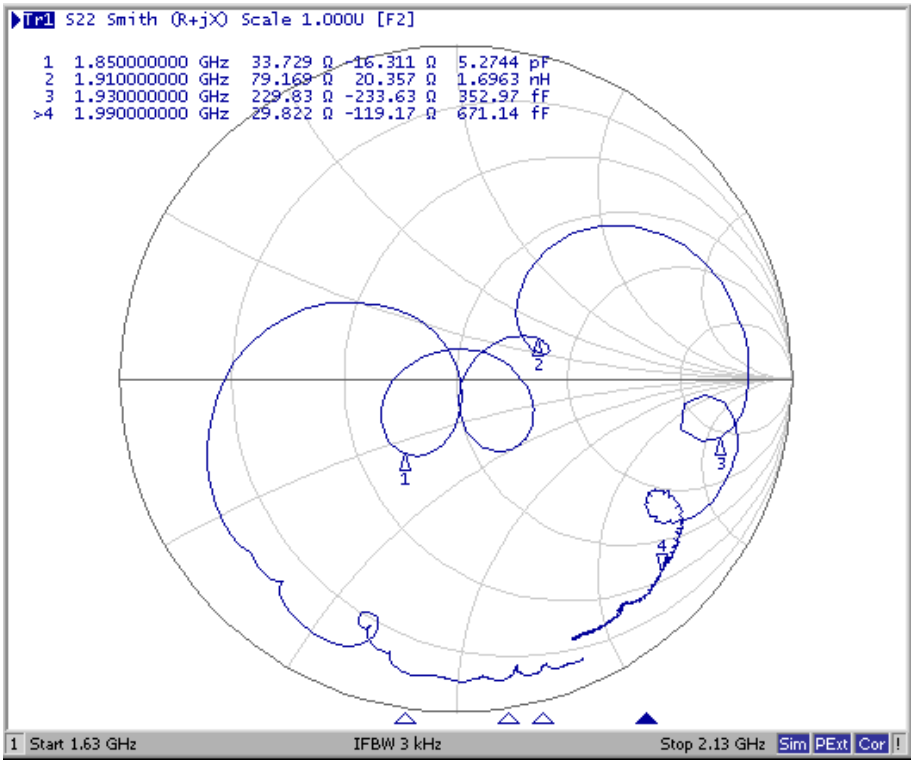
VSWR



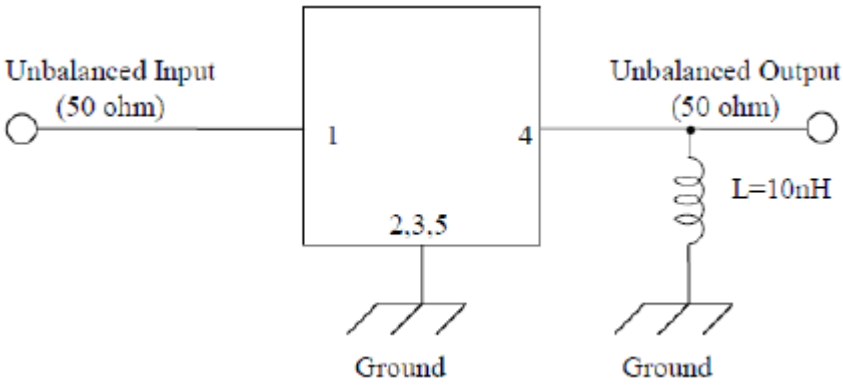


Smith Chart

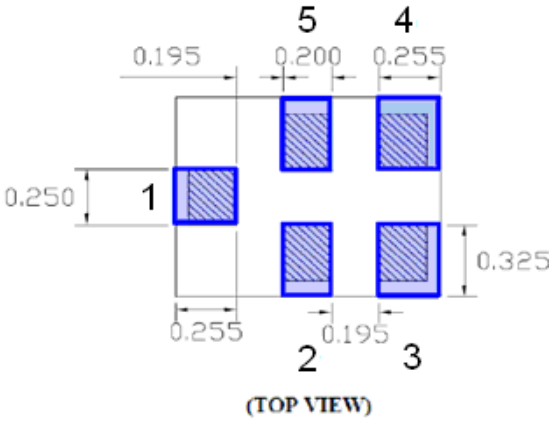




MEASUREMENT CIRCUIT:

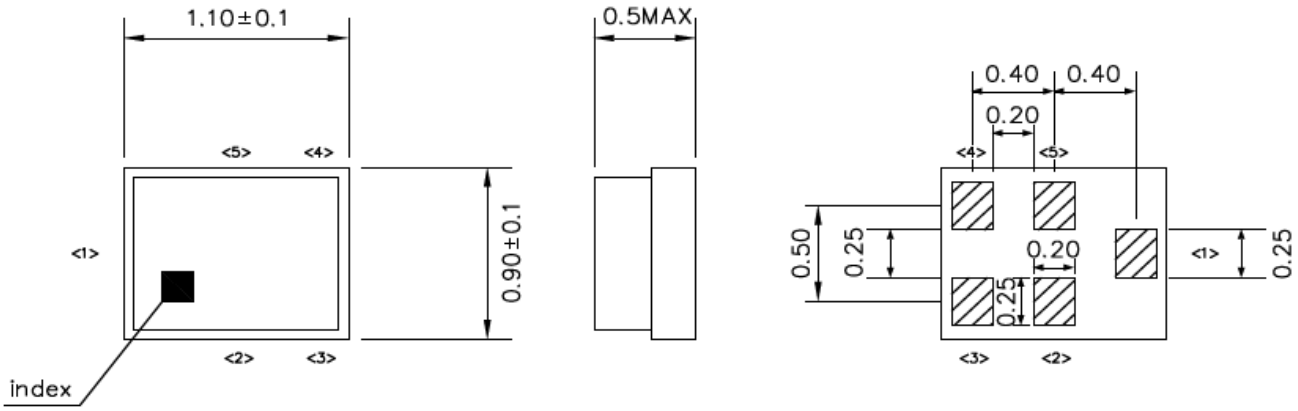


PCB Footprint:



OUTLINE DRAWING:

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

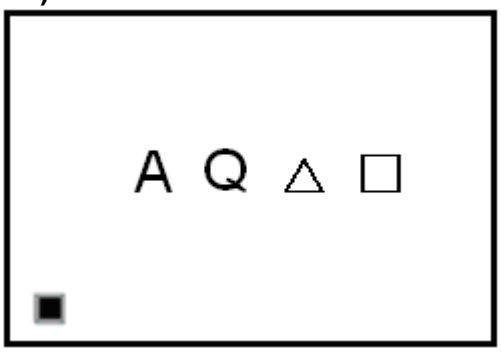


Unit : mm

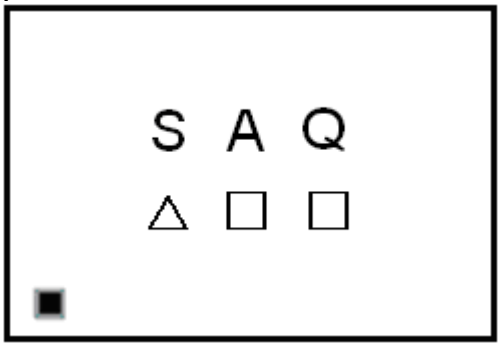
Pin Configuration

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

Top View (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)

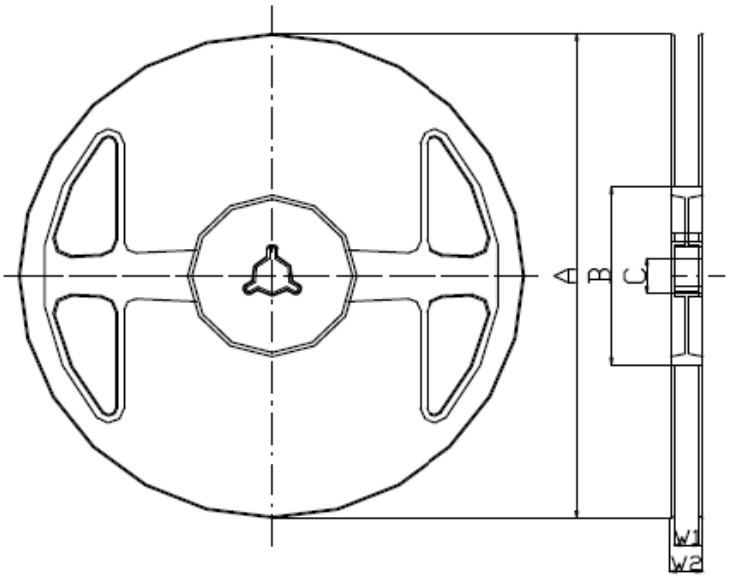
Date Code:

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:

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

REEL DIMENSION

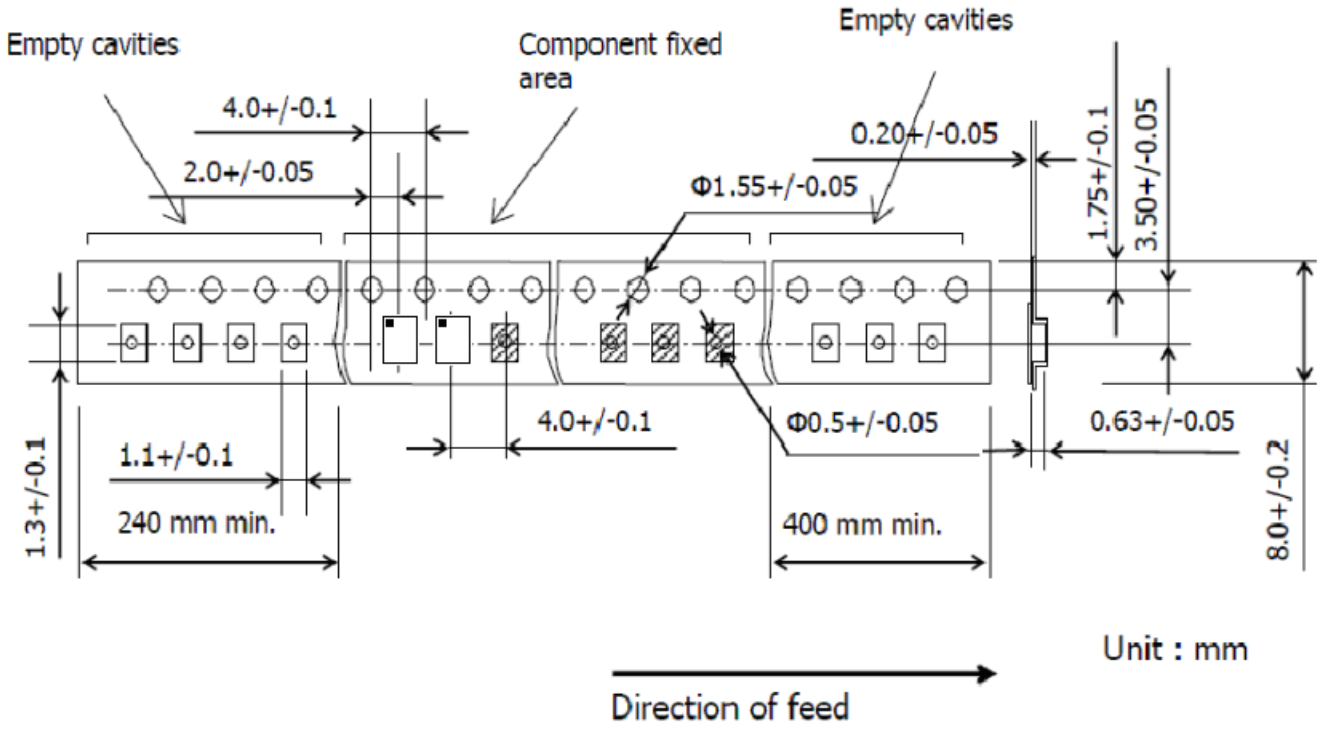


Materials of Reel
Material : Polystyrene + Carbon
Color : Black
Surface resistance (reference value) : $10^9\Omega$/sq Max.

Unit : mm

A	B	C	W1	W2
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.