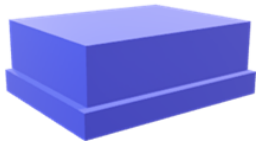
RFMi
BRAND OF AKOUSTIS

RoHS compliant

SF2549L

942.5 MHz SAW Filter



SM1109

MAXIMUM RATING:

- Maximum Input Power: 10 dBm
- Operating Temperature: -40 °C to +85 °C
- Storage Temperature Range: -40 °C to +85 °C
- Moisture Sensitive Level: Level 3(MSL 3)
- ESD 100V(MM) 200V(HBM)

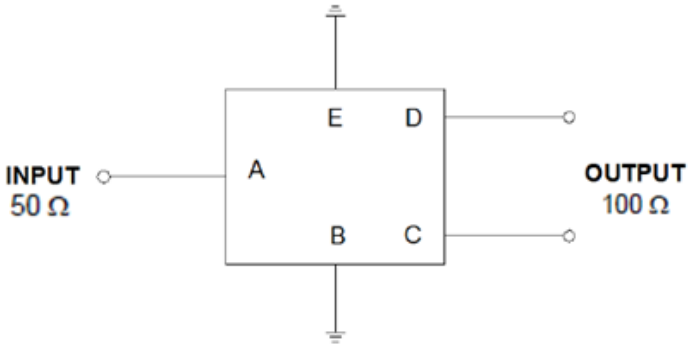
ELECTRICAL CHARACTERISTICS

Terminating source impedance: Zs = 50 Ω
(Single)

Terminating load impedance: Z_L = 100 Ω (Balance)

Item	Unit	Min.	Typ.	Max.
Center Frequency	MHz	-	942.5	-
Insertion Loss (925 ~ 960 MHz)	dB	-	1.9	3.3
Insertion Loss (927.4 ~ 957.6 MHz)	dB	-	2.0	2.8
Amplitude Ripple (925 ~ 960 MHz)	dB_{p-p}	-	0.8	1.9
VSWR (925 ~ 960 MHz)	-	-	1.8	2.4
Amplitude Balance (925 ~ 960 MHz)	dB	-1.2	-0.3/+0.4	+1.2
Phase Balance (925 ~ 960 MHz)	deg	-10	-1.5/+3.4	+10
Attenuation (Reference level from 0 dB)				
DC ~ 880 MHz	dB	50	65	-
880 ~ 915 MHz	dB	5	56	-
882.4 ~ 912.6 MHz	dB	50	56	-
980 ~ 1025 MHz	dB	23	32	-
1025 ~ 2880 MHz	dB	35	56	-
2880 ~ 6000 MHz	dB	30	44	-

MEASUREMENT CIRCUIT:

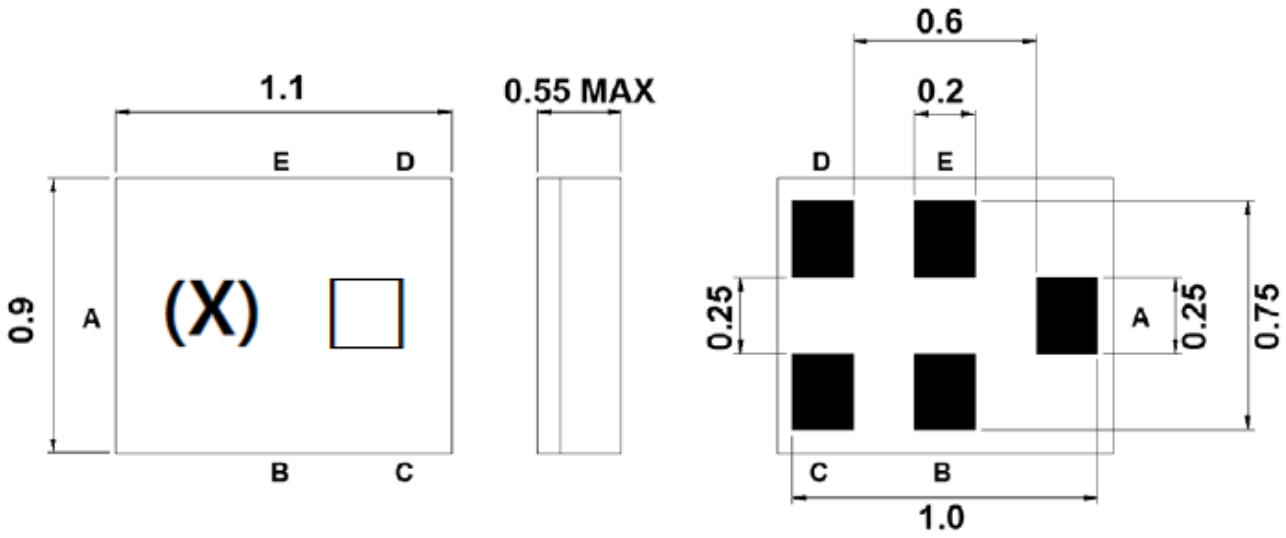


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

OUTLINE DRAWING:



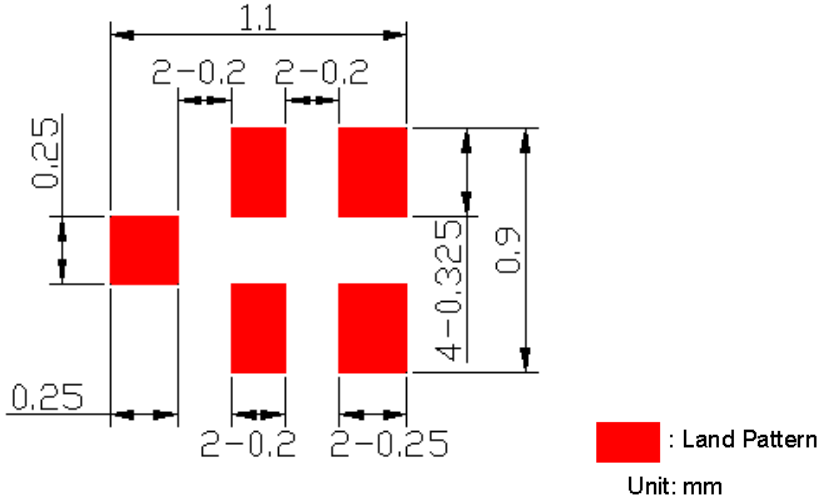
Marking Descriptions	
(X)	Series Number
☐	Date Code(Year+Month)

Pin Description	
B, E	Ground
A	Input
C,D	Balanced Output

Dare Code(Year+Month)

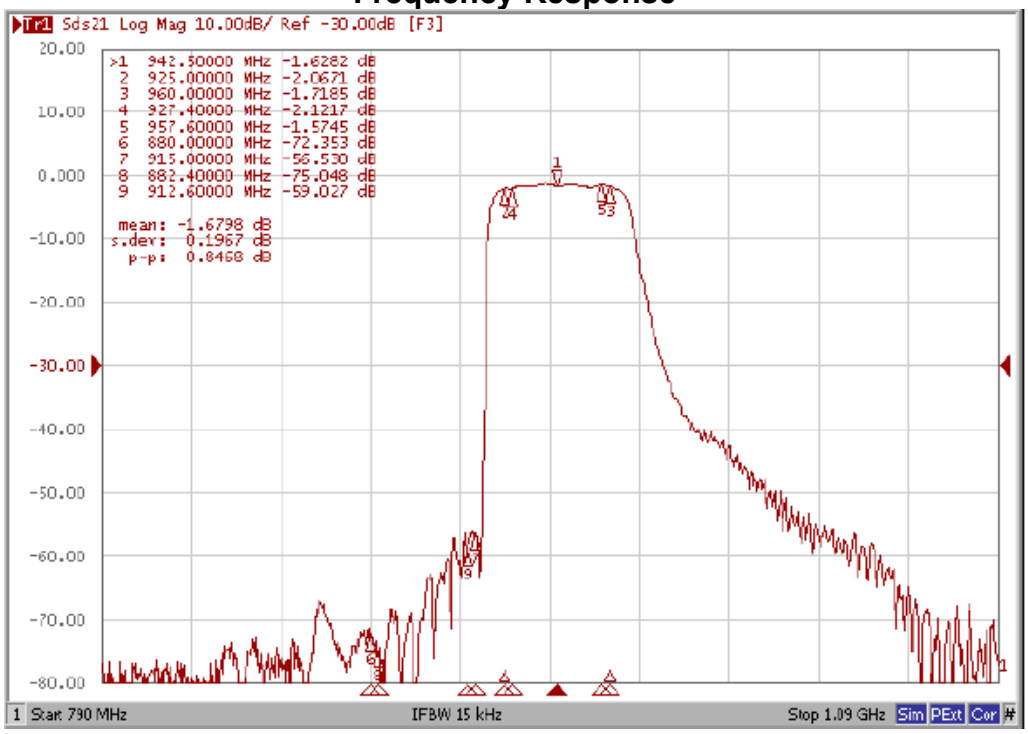
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

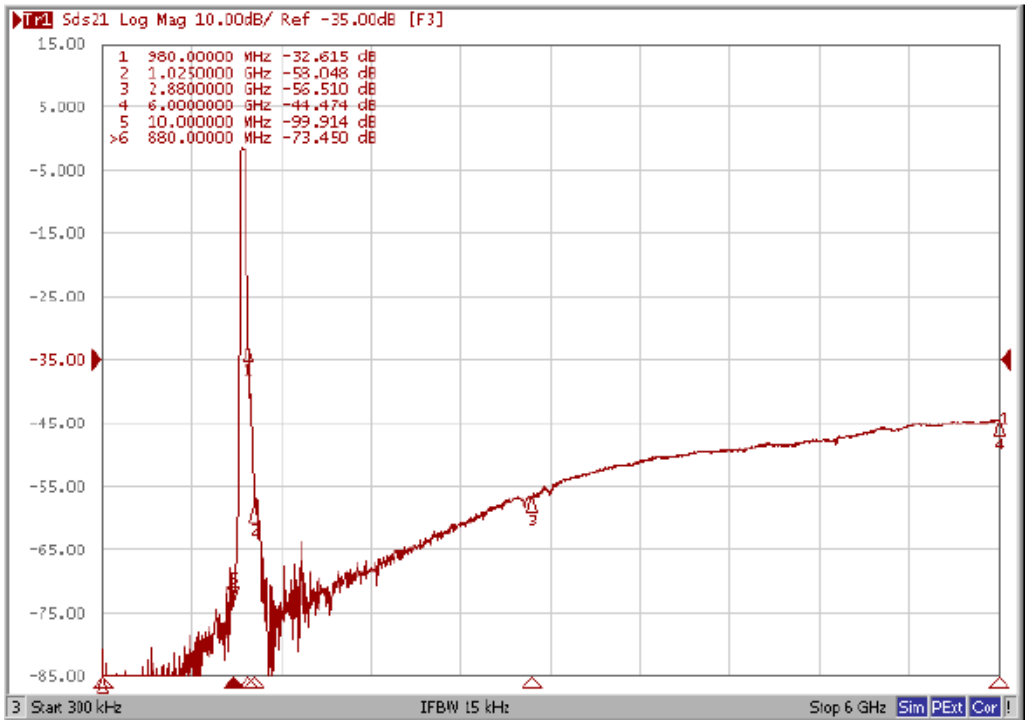
PCB Footprint:



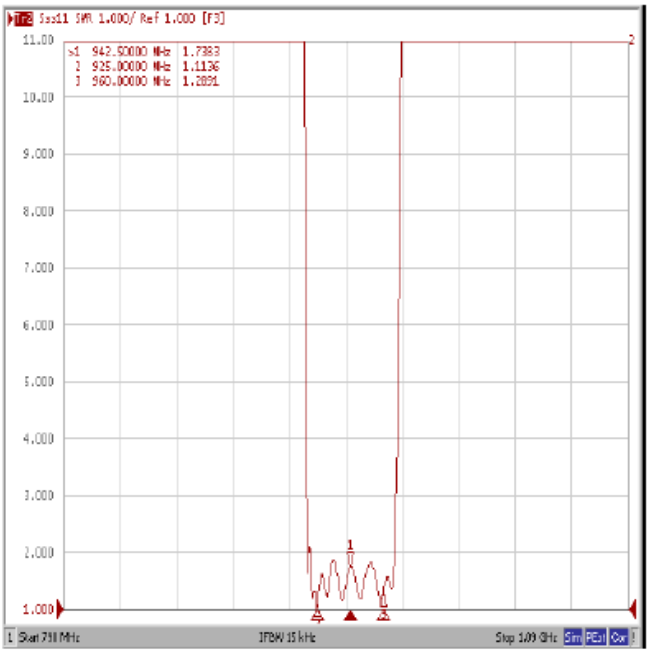
EFREQUENCY CHARACTERISTICS:

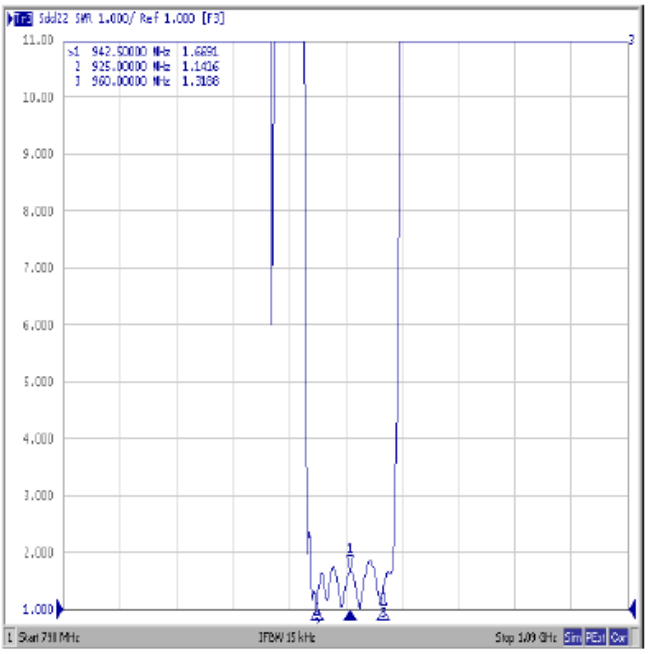
Frequency Response



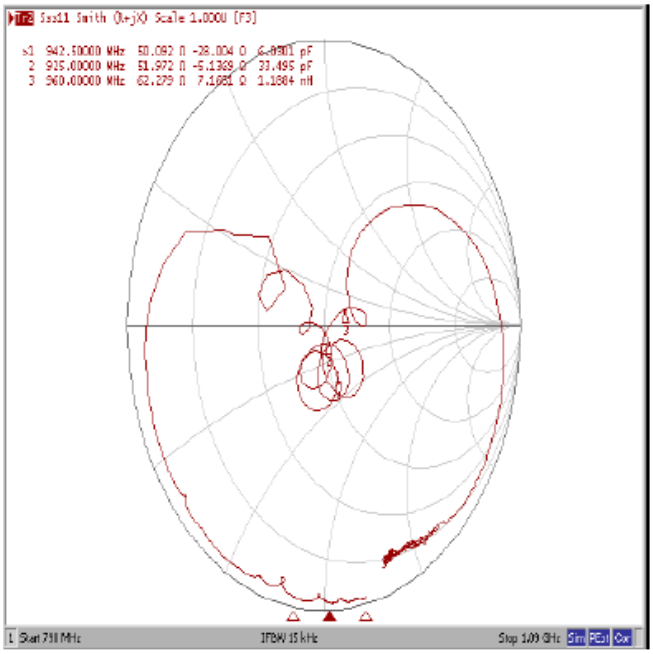


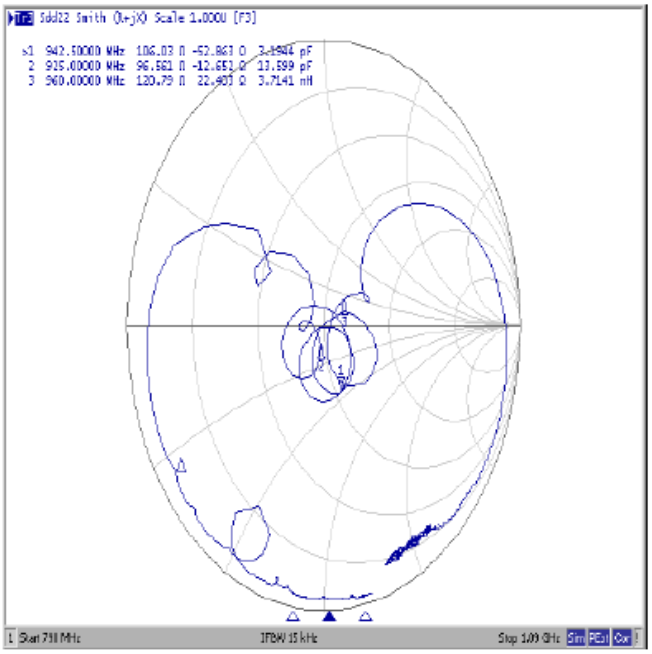
VSWR



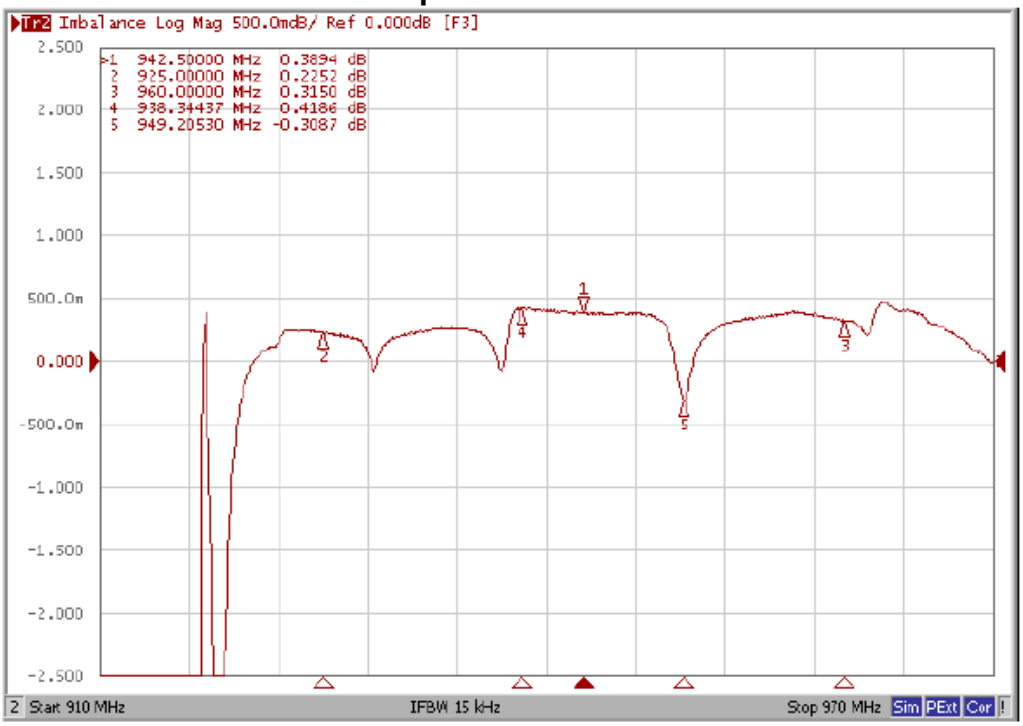


Smith Chart

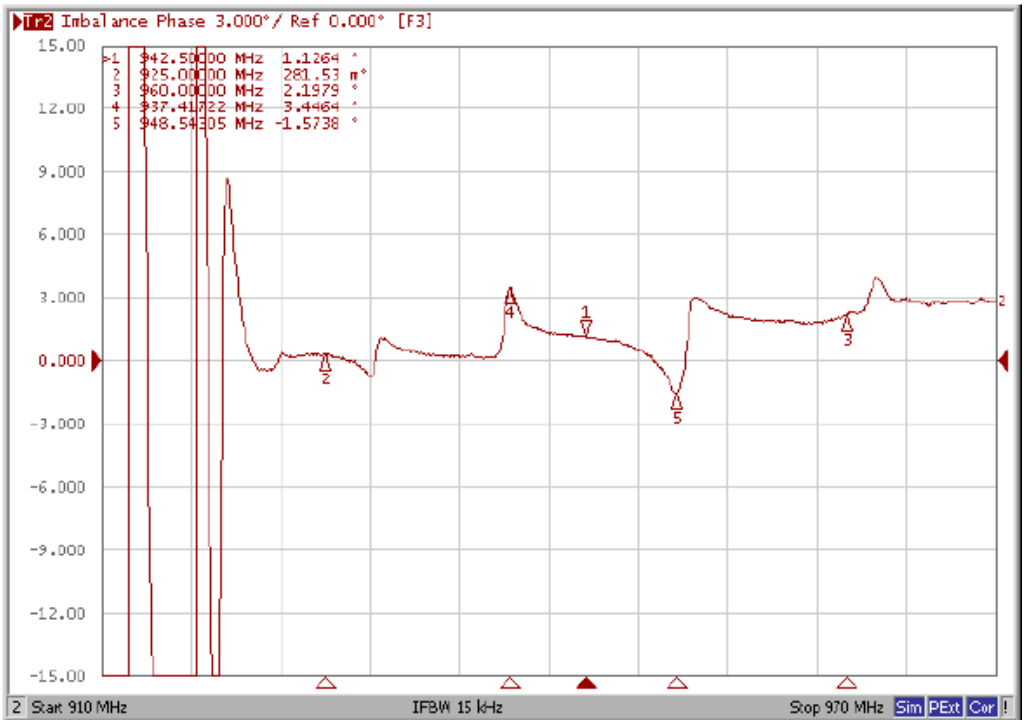




Amplitude balance



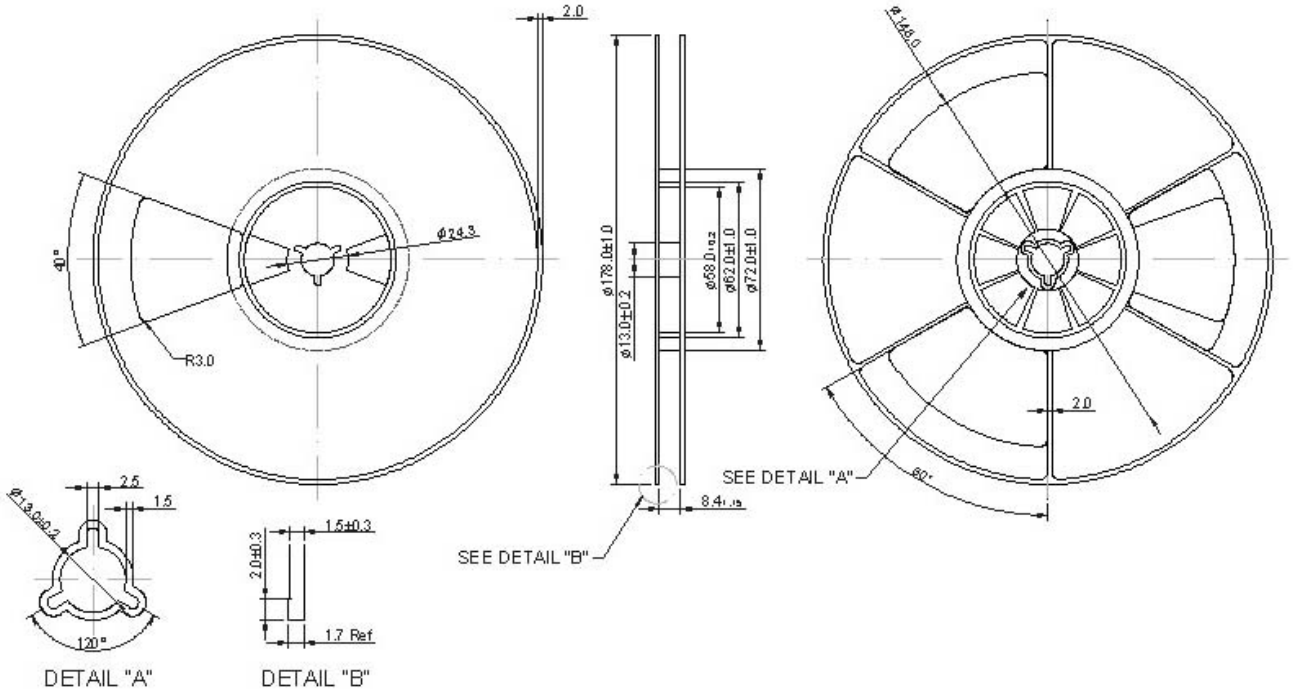
Phase balance



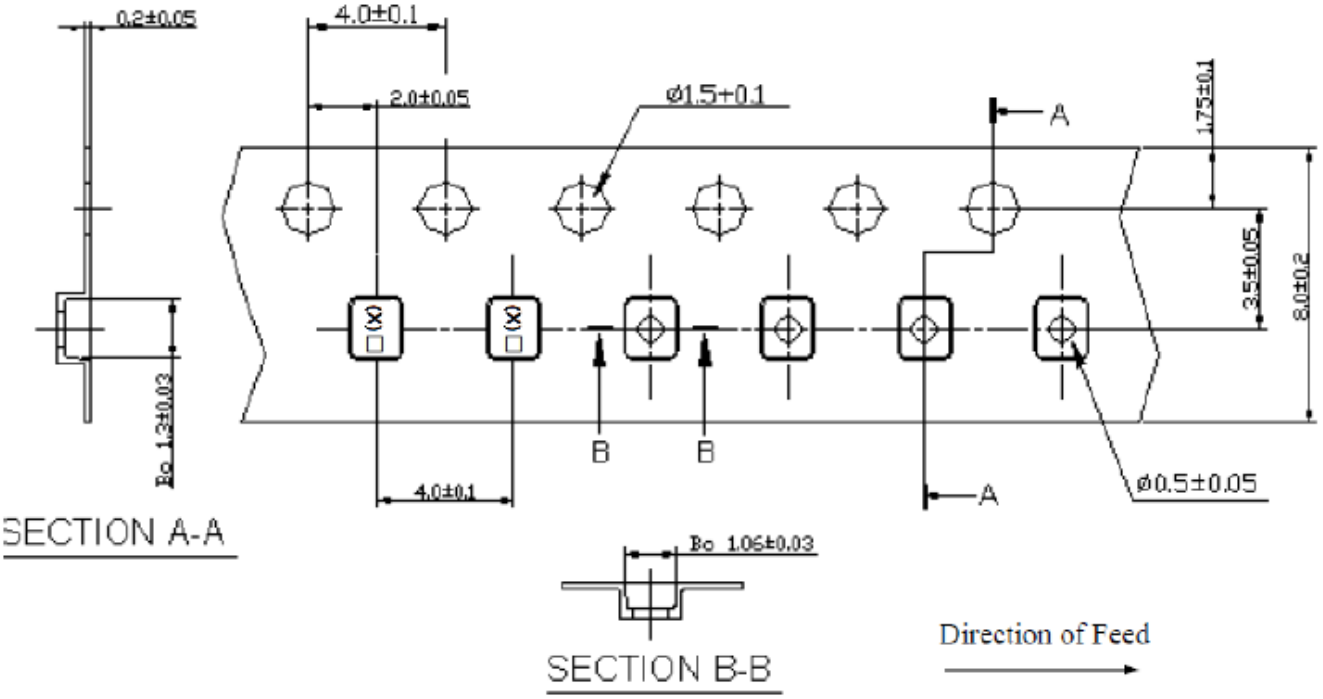
PACKING:

REEL DIMENSION

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



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.