

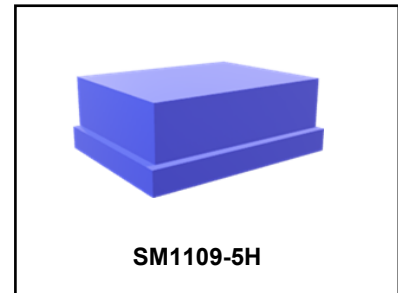
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1

Absolute Maximum Ratings

Rating	Value
Input Power 25dBm (2402.5~2481.5MHz) (Ta=+50deg C,5000h)	
DC Voltage	5V
Operating Temperature Range	-30°C to +85°C
Storage Temperature Range	-40°C to +100°C
ESD	50V(MM) 100V(HBM)

SF2516LM

**2442 MHz
SAW Filter**



Electrical Characteristics

Terminating source impedance : $Z_s = 50 \parallel 8.2nH \Omega$ (Single-ended) Terminating load impedance : $Z_L = 50 \parallel 6.2nH \Omega$ (Single-ended)

Item	Unit	Min.	Typ.	Max.	Note
Center Frequency Fc	MHz	-	2442		-
Insertion Loss (2402.5~2421.5MHz)	IL dB(*1)(*2)	-	1.1	1.8	CH1
Insertion Loss (2407.5~2471.5MHz)	IL dB(*1)(*2)		1.0	1.6	CH2 to 11
Insertion Loss (2457.5~2476.5MHz)	IL dB(*1)(*2)		1.1	1.7	CH12
Insertion Loss (2462.5~2481.5MHz)	IL dB(*1)(*2)		1.2	2.0	CH13
Insertion Loss (2402.5~2481.5MHz)	IL dB(*1)(*2)	-	1.2	1.7	+25 °C
Amplitude Ripple (2402.5~2481.5MHz)	dB	-	0.8	2.6	Any 19 MHz
Input VSWR (2402.5~2481.5MHz)			1.3	2.0	
Output VSWR (2402.5~2481.5MHz)			1.2	2.0	
Attenuation (reference level from 0 dB)					



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.

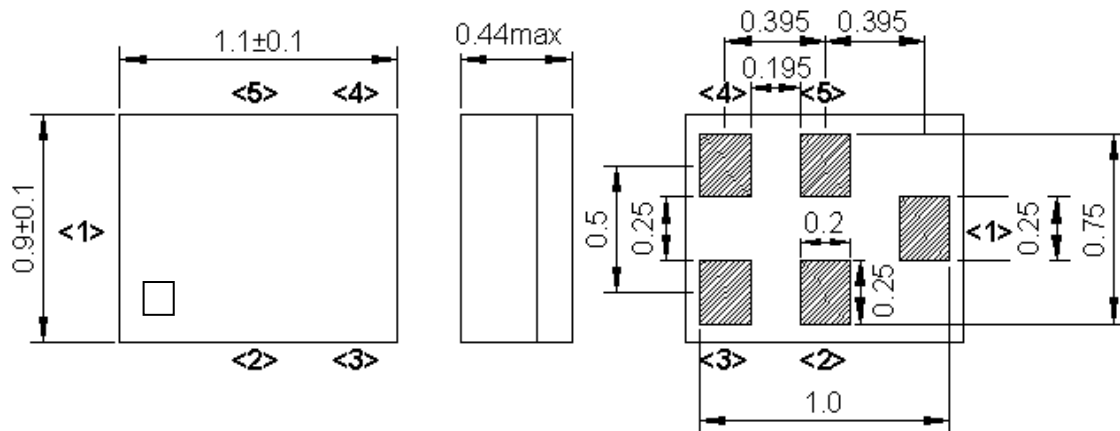
699 ~ 960 MHz	dB	33	37	-	-
1425 ~ 2170 MHz	dB	25	28	-	-
2300 ~ 2370 MHz	dB(*3)	28	37	-	
2370 ~ 2375 MHz	dB(*3)	10	35	-	
2375 ~ 2380 MHz	dB(*3)	5	22	-	
2500 ~ 2505 MHz	dB(*3)	3	22	-	-30 to+85°C-
	dB(*3)	12	22	-	+25°C
2505 ~ 2510 MHz	dB(*3)	9	35	-	-
2510 ~ 2570 MHz	dB(*3)	21	34	-	
2570 ~ 2690 MHz	dB	30	33	-	
2690 ~ 7500 MHz	dB	27	32	-	
4900 ~ 5805 MHz	dB	35	41	-	
7200 ~ 7500 MHz	dB	30	39	-	

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

(*2) Integrated Insertion Loss over 19MHz CH BW.

(*3) Integrated attenuation over 5MHz CH BW.

Outline



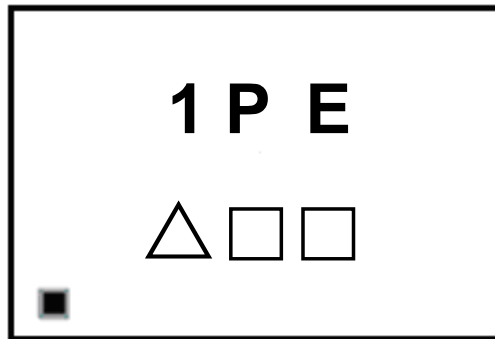
Drawing

Pin assignment

Pin No.	Pin name	Description
1	In	Input
2	GND	Ground
3	GND	Ground
4	Out	Output
5	GND	Ground

Figure 1. Dimensions and Pin assignment

Top View (Mass Production)



Marking name : 1 PE

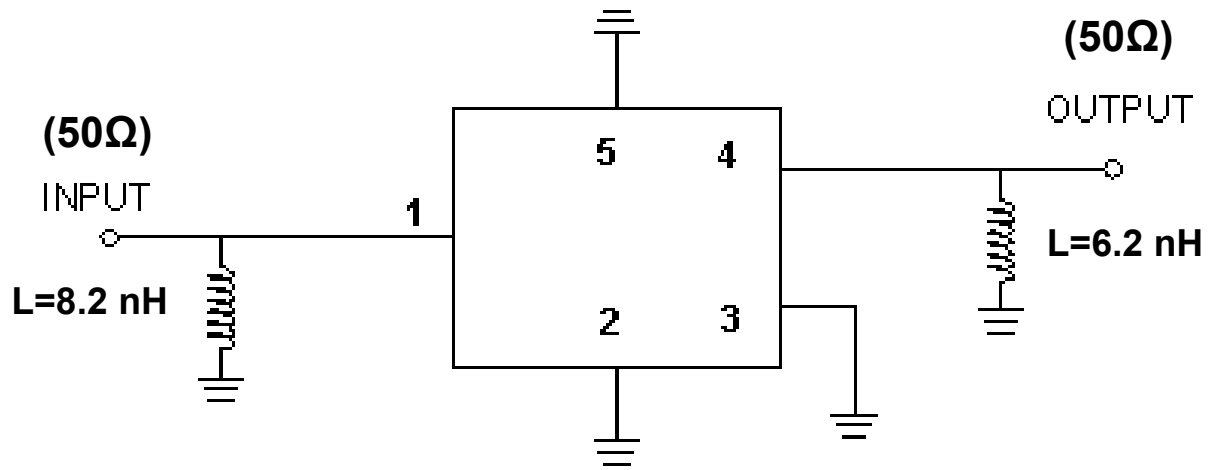
△ : Date Code

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

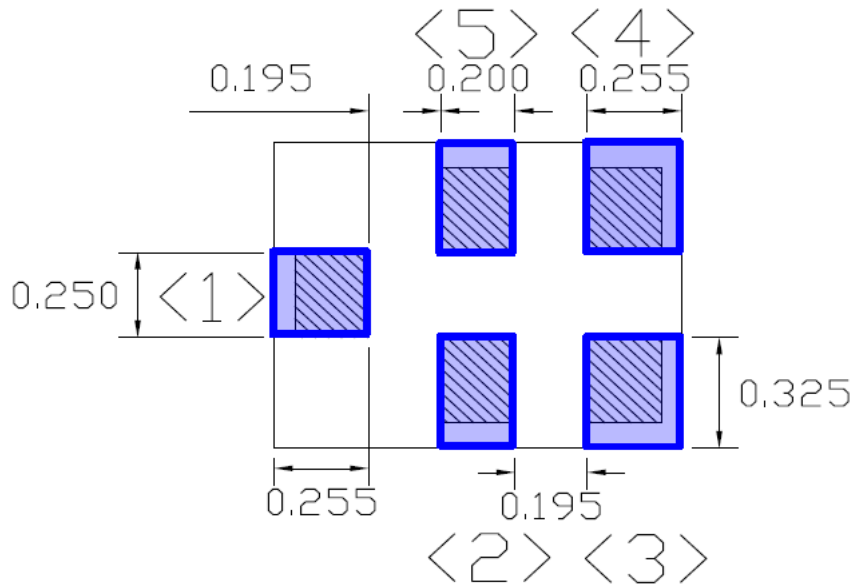
Product date Code (EIAJ)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017 / 2021	A	B	C	D	E	F	G	H	J	K	L	M
2018 / 2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z

Measurement Circuit

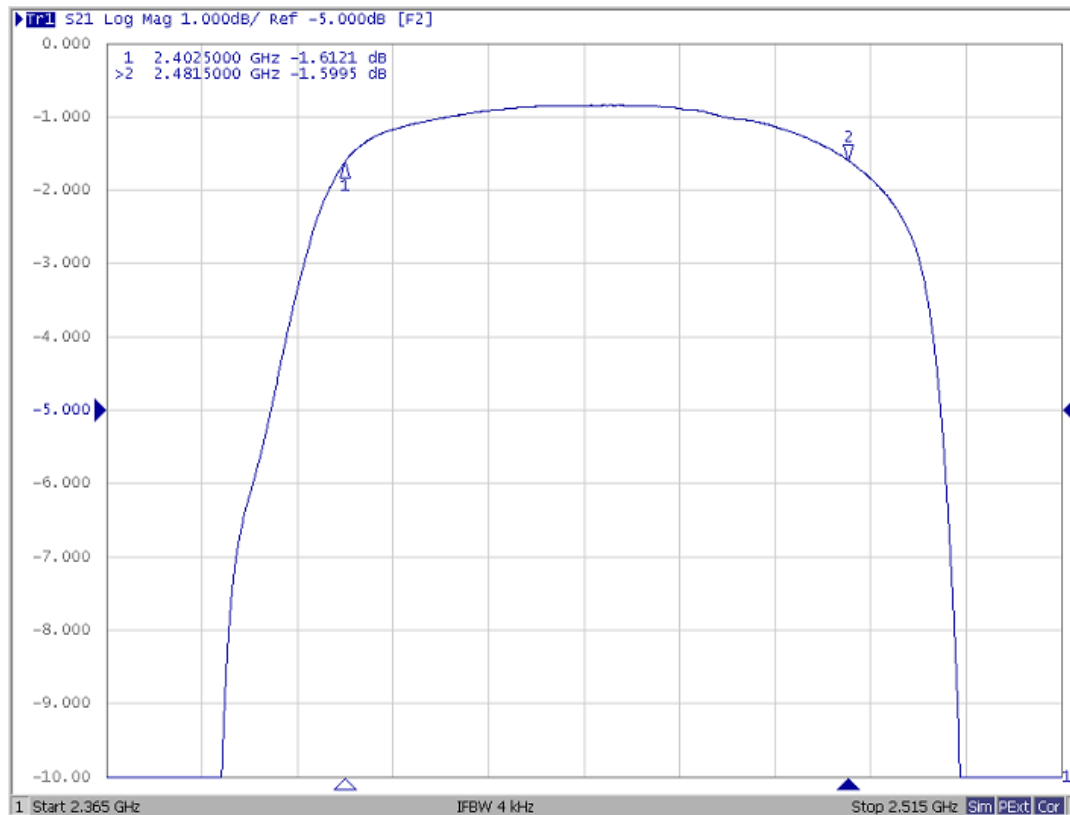
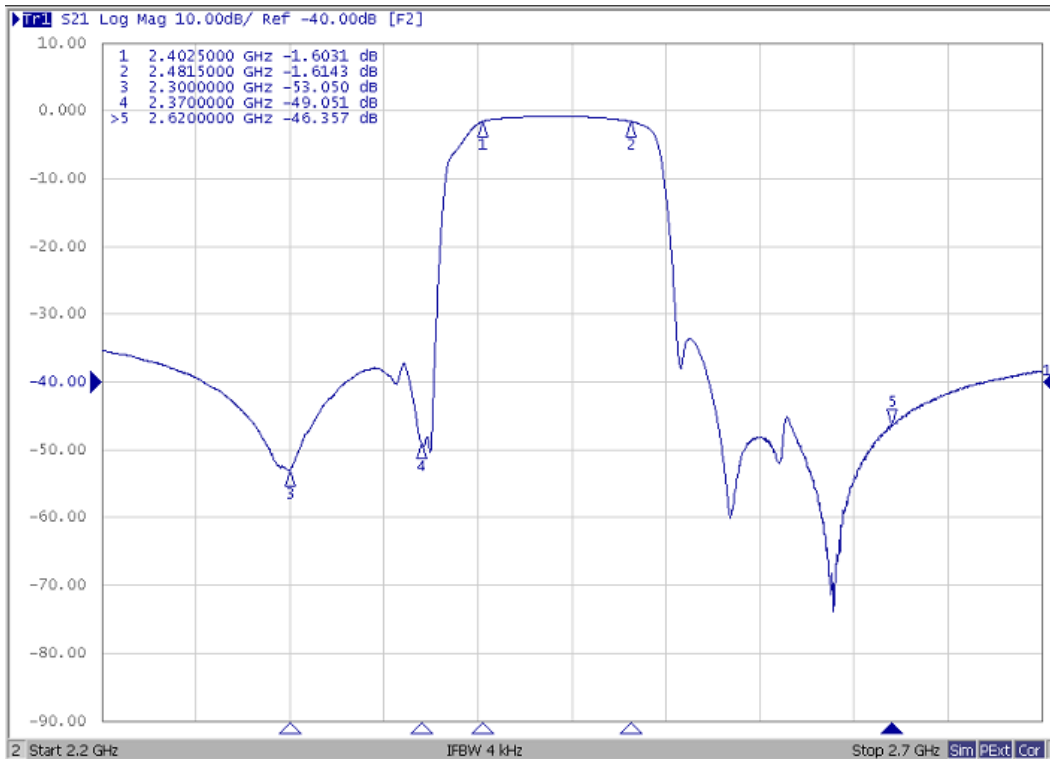


PCB Footprint

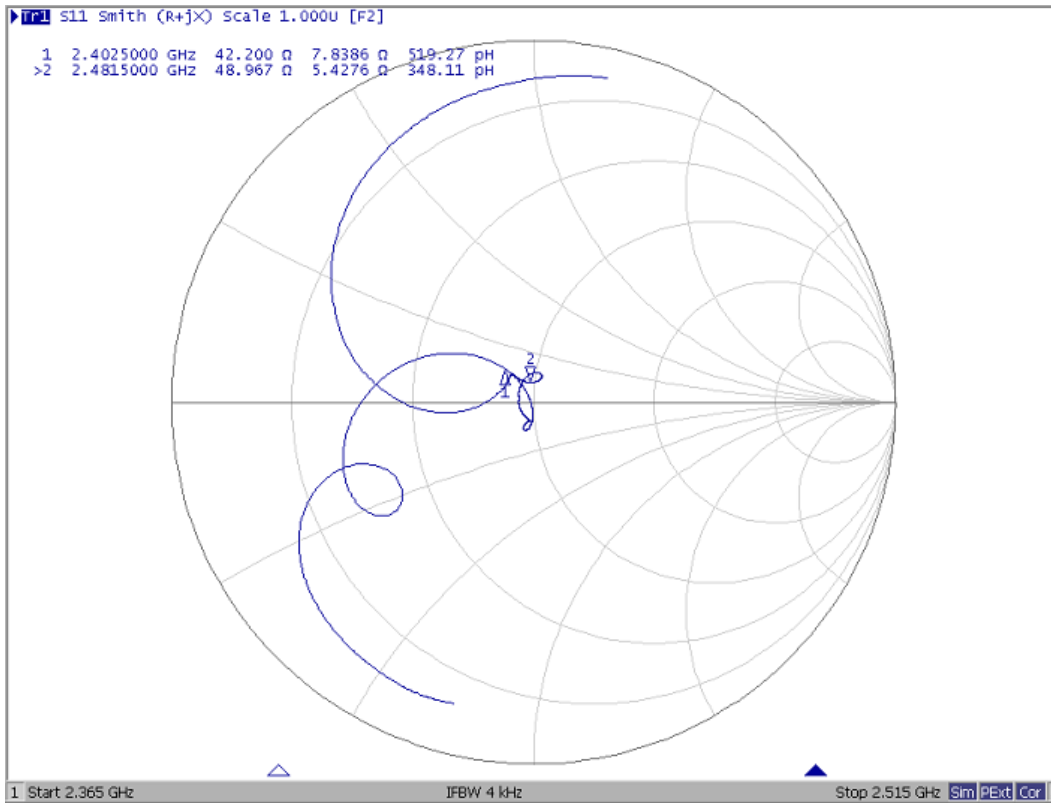
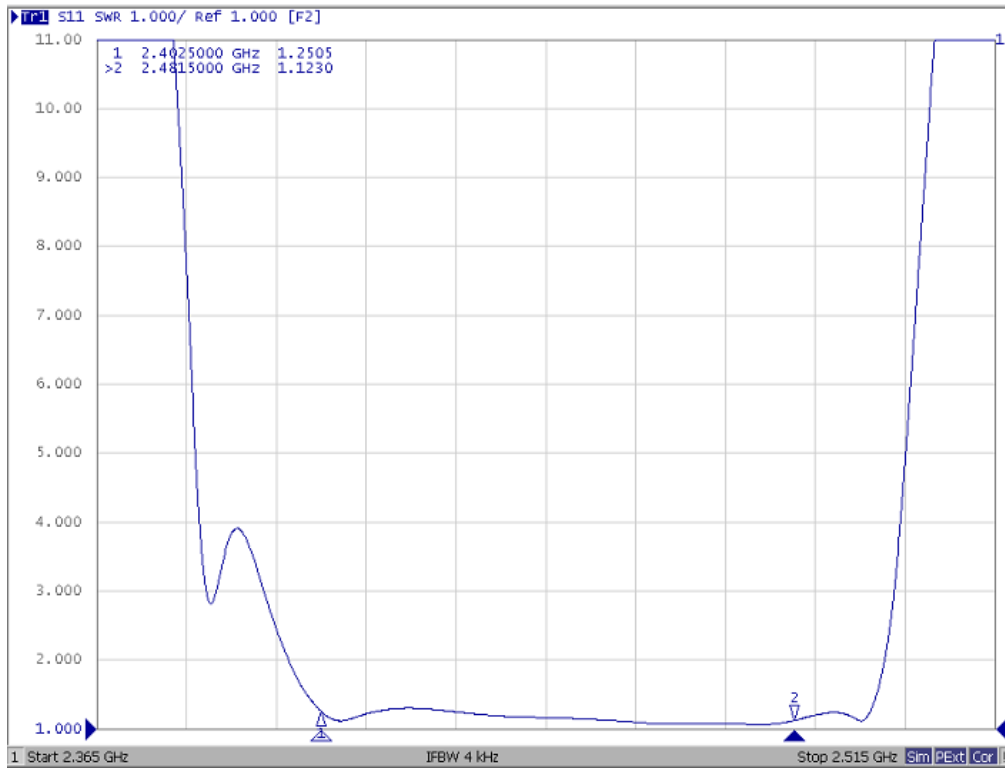


Frequency Characteristics

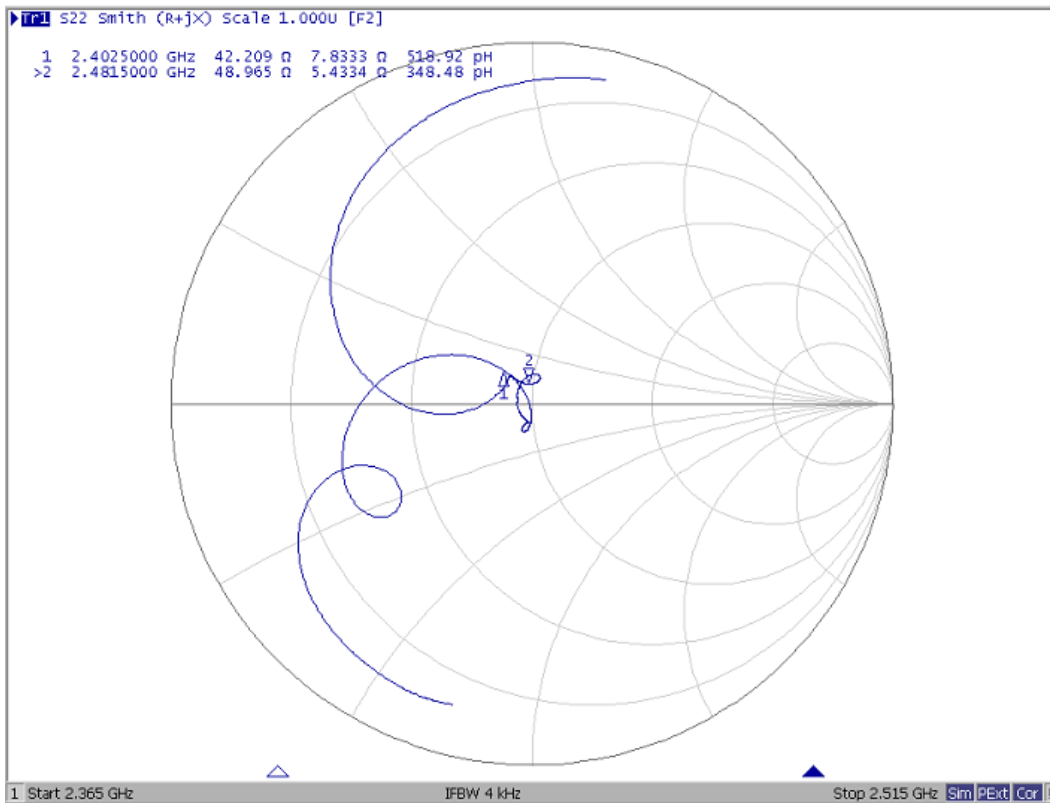
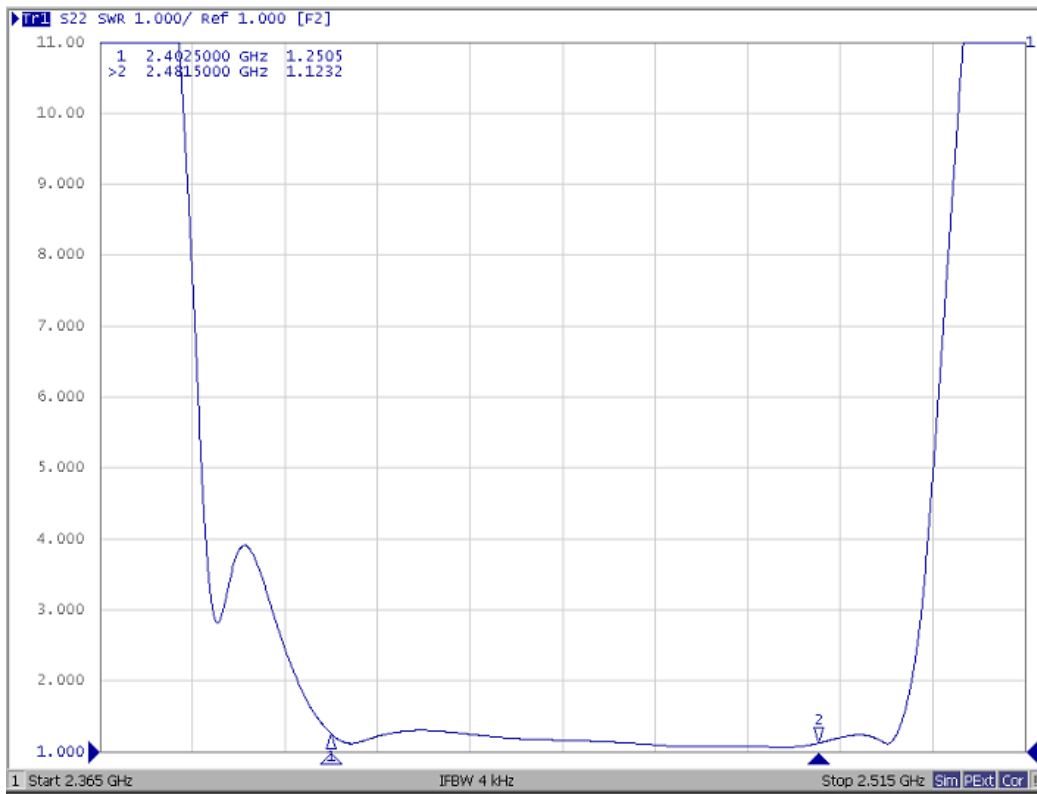
Passband



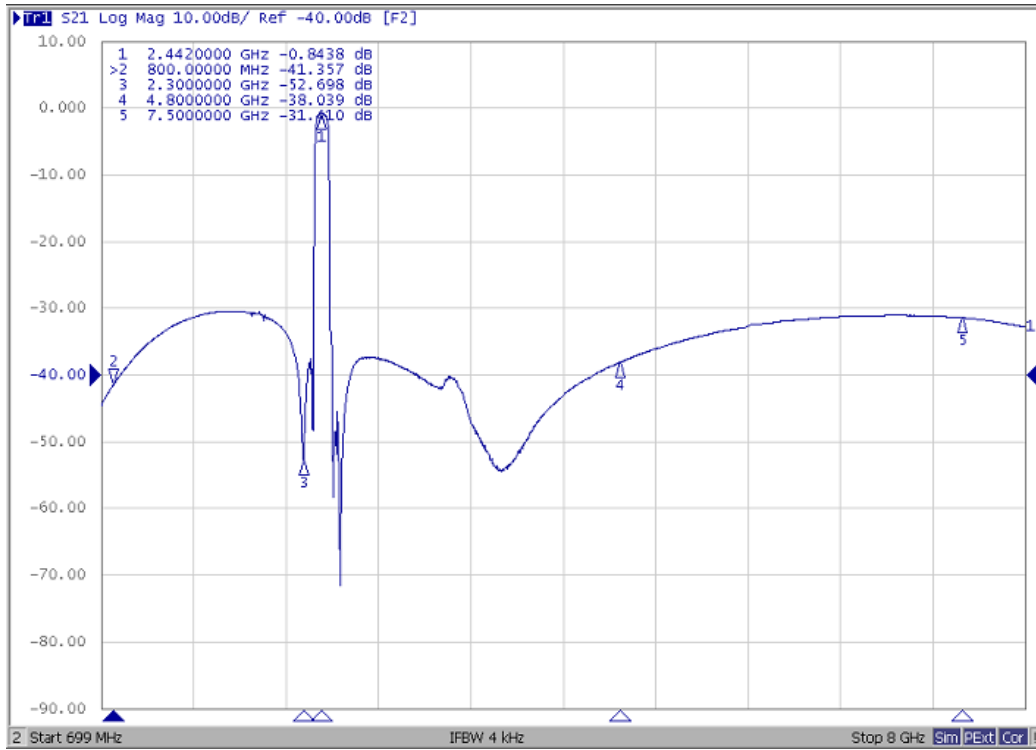
Input Port



Output Port

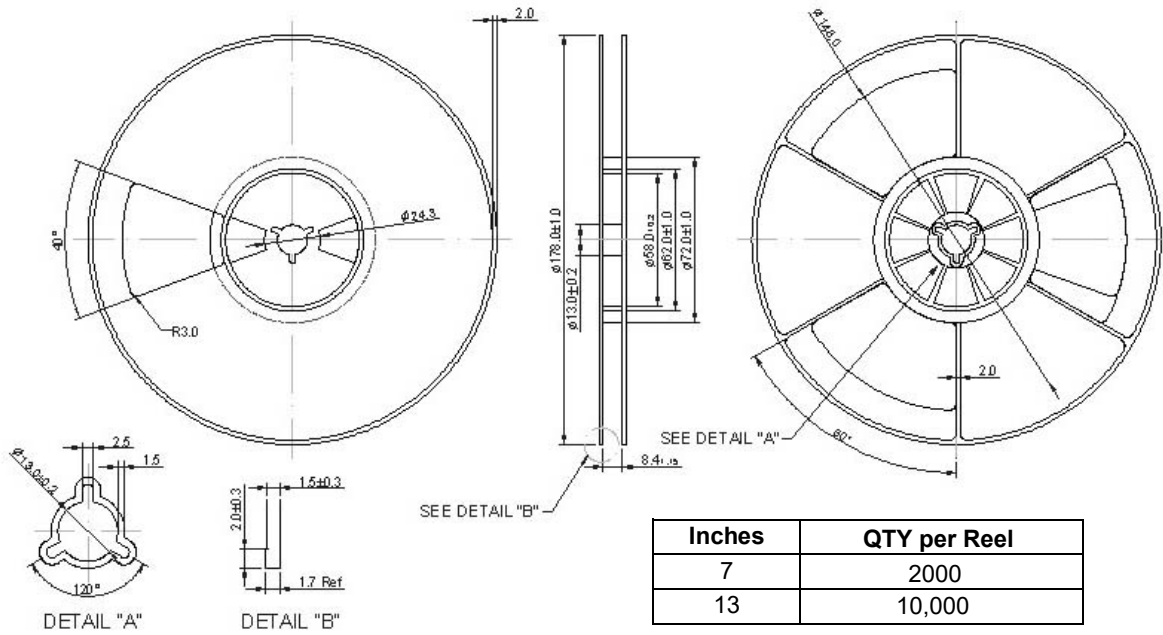


Wide

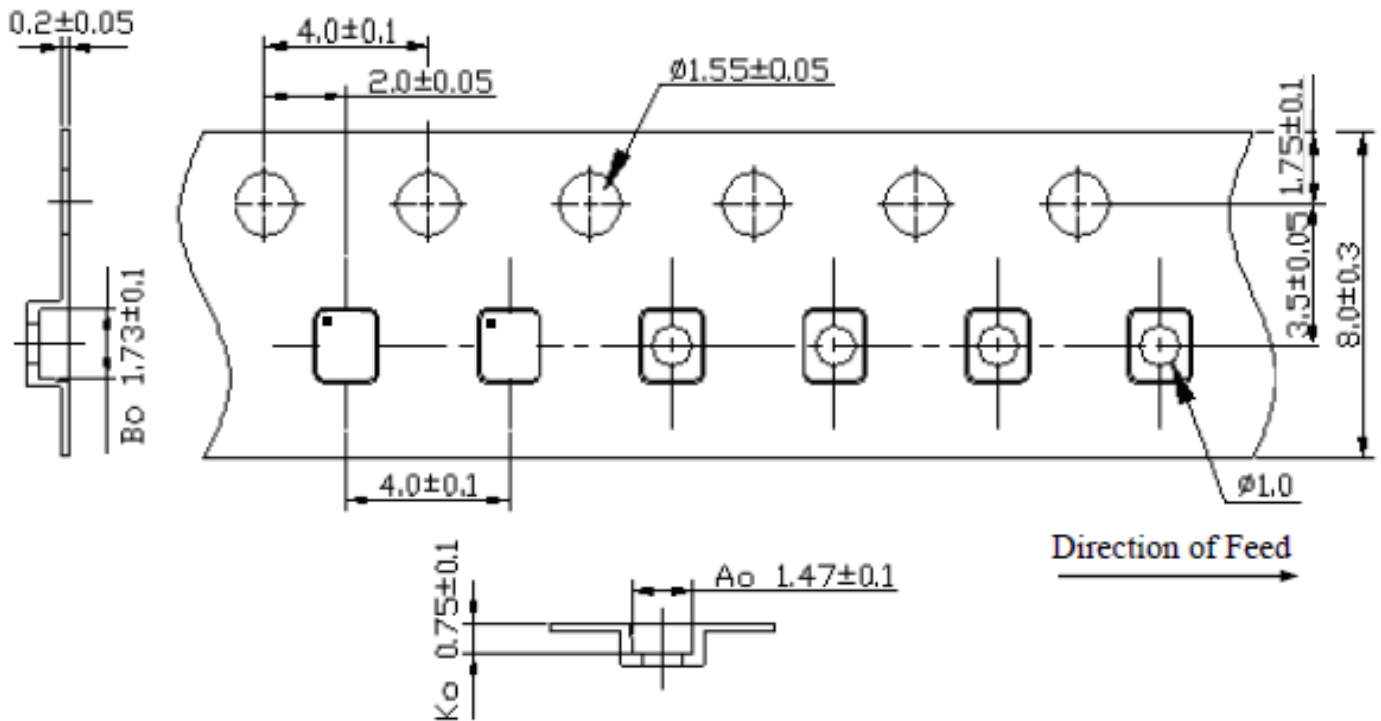


Reel Dimension

Tape and Reel Standard per ANSI/EIA-481



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 (10 seconds).
4. Time: 5 times maximum.

