

SM1109

MAXIMUM RATING:

- Input Power Level: 10 dBm
- DC Voltage : 3V
- Operating Temperature: -30°C to +85°C
- Storage Temperature: -40°C to +85°C
- Moisture Sensitivity Level: Level 3 (**MSL3**)

ELECTRICAL CHARACTERISTICS:

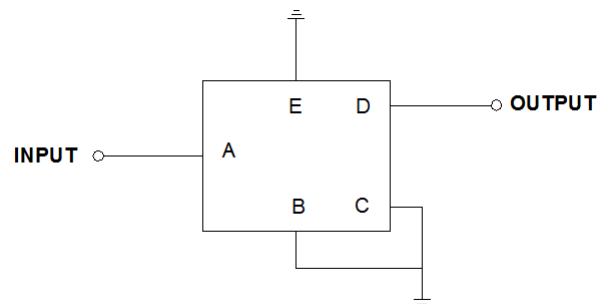
Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

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

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	1950	-
Insertion Loss (1920~1980 MHz) IL	dB	-	1.6	2.5
Amplitude Ripple (1920~1980 MHz)	dB _{p-p}	-	0.7	2.0
VSWR (1920~1980 MHz)	-	-	2.0	2.4
Attenuation (Reference level from 0 dB)				
DC ~ 1577 MHz	dB	30	33	-
1577 ~ 1880 MHz	dB	22	30	-
2110 ~ 2170 MHz	dB	35	42	-
2500 ~ 3120 MHz	dB	28	34	-
3840 ~ 3960 MHz	dB	25	31	-
5760 ~ 5940 MHz	dB	15	21	-

Notes: No Matching Network.

MEASUREMENT CIRCUIT:



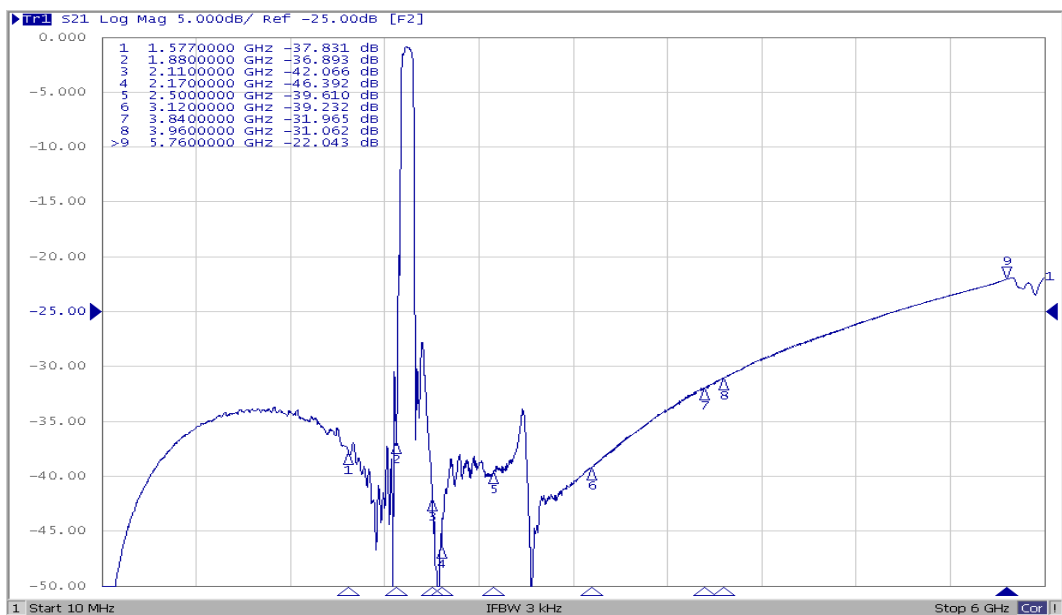
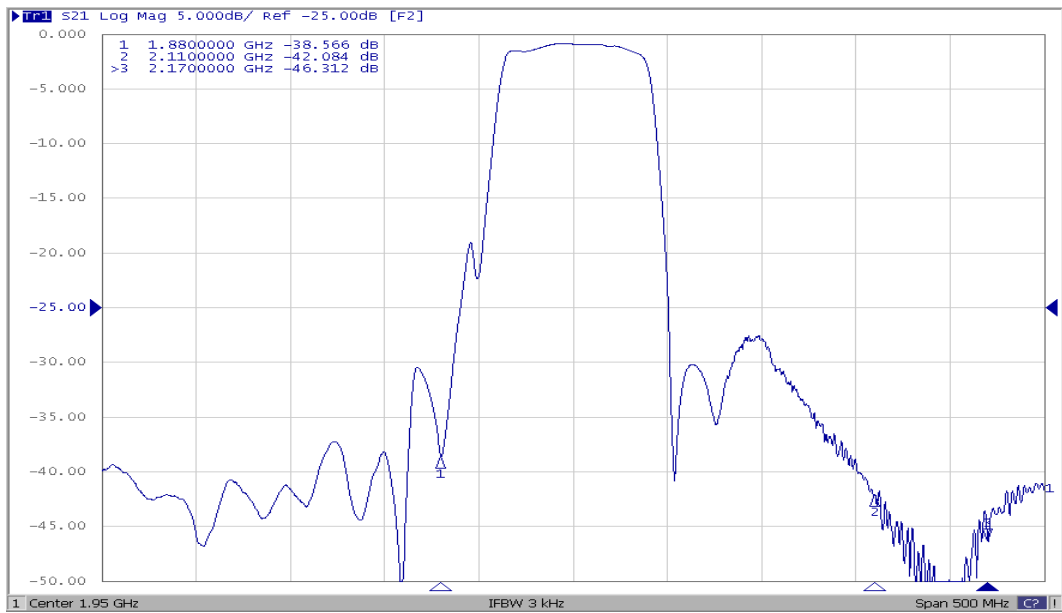
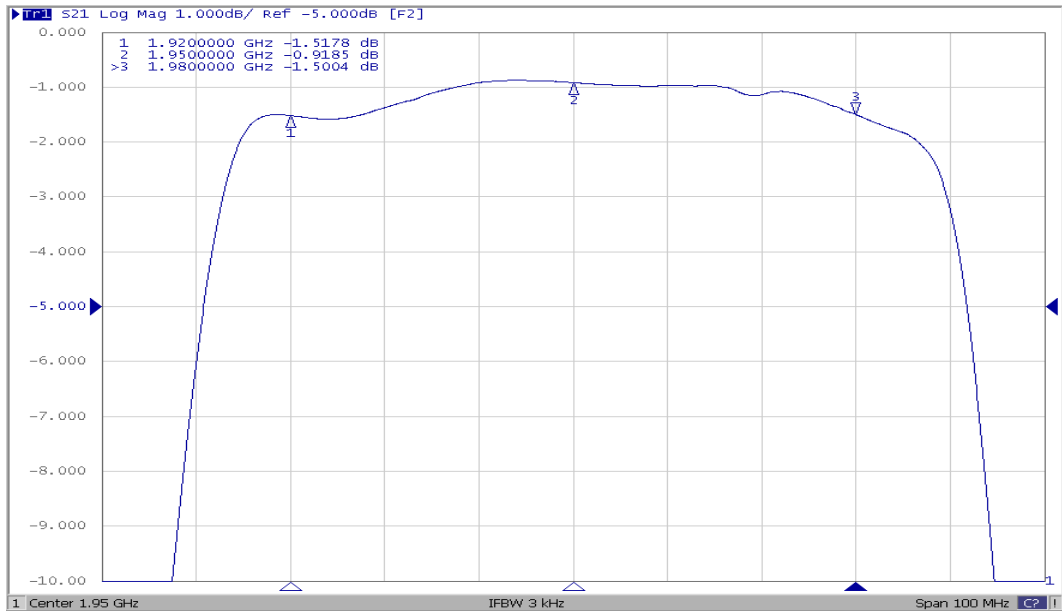
Source & Load Impedance: 50 Ω

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.



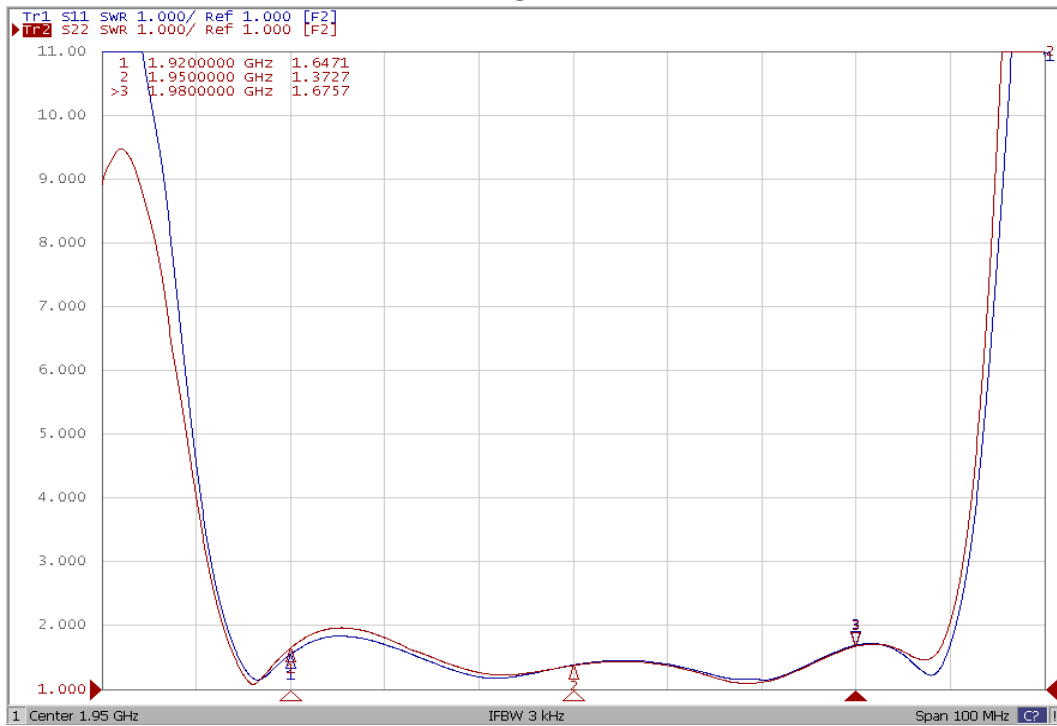
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

FREQUENCY CHARACTERISTICS:

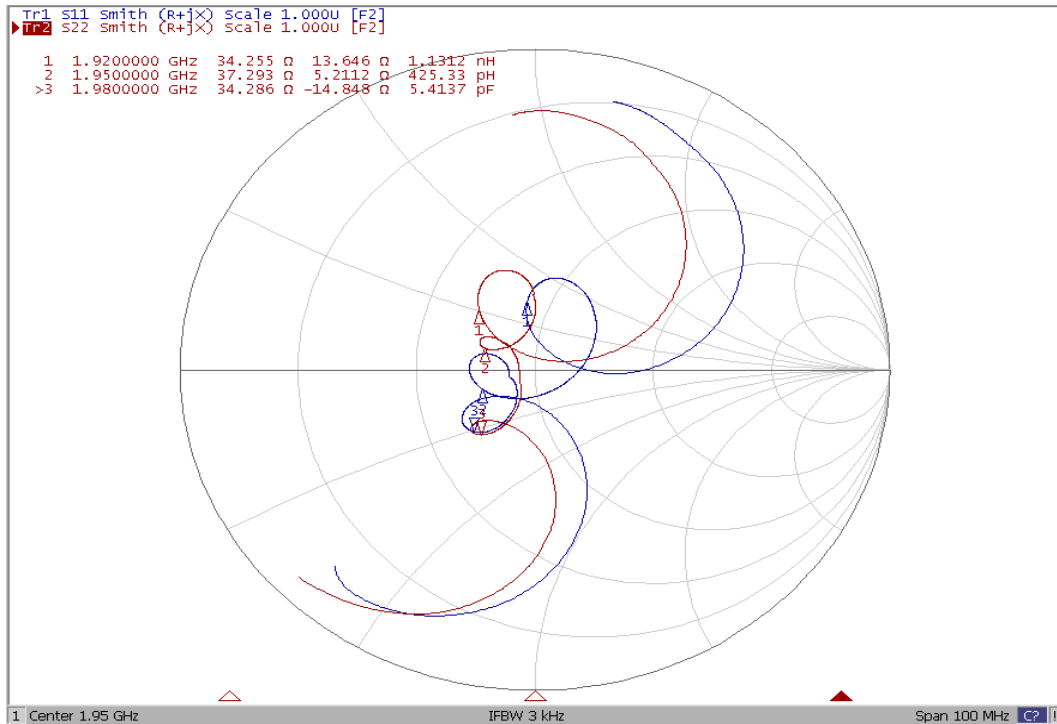


Reflection Functions:

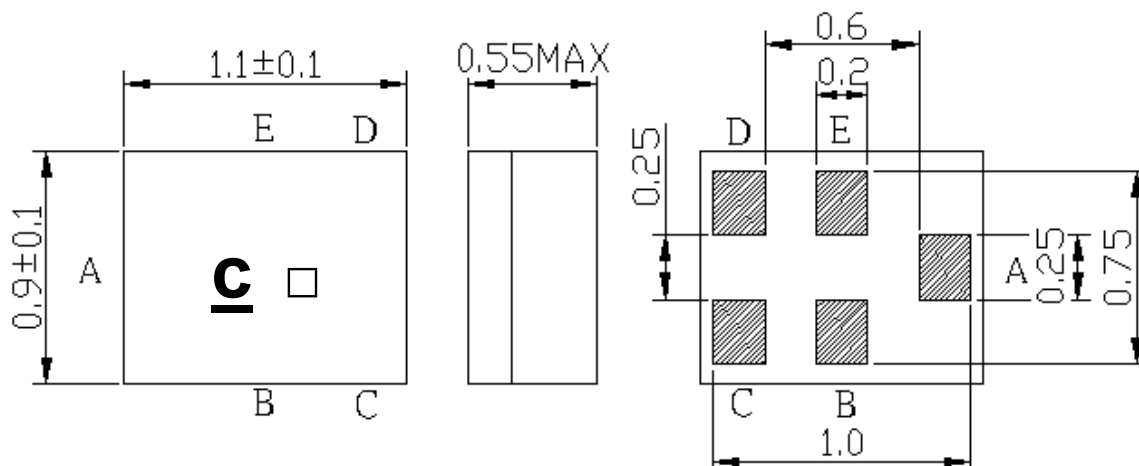
VSWR



Smith Chart



OUTLINE DRAWING:



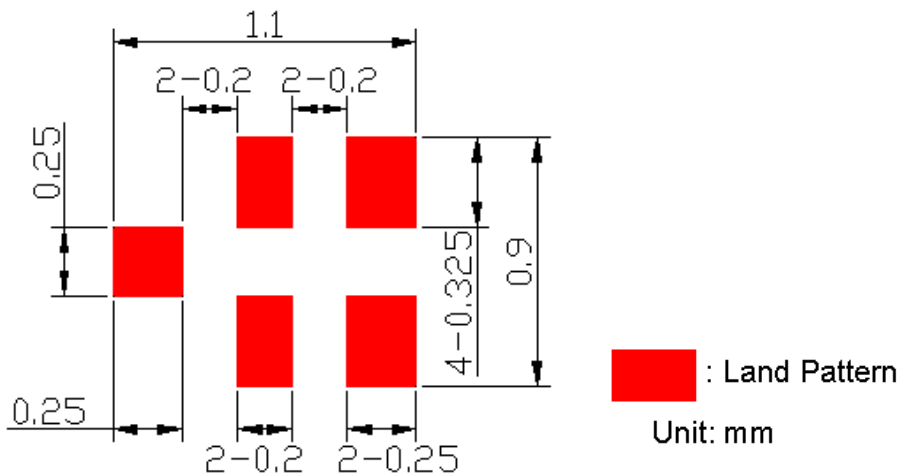
Pin Description	
B, C, E	Ground
A	Input
D	Output

Marking Descriptions	
□	Date Code(Year+Month)

□ : Year/Month Code (Follow the table)

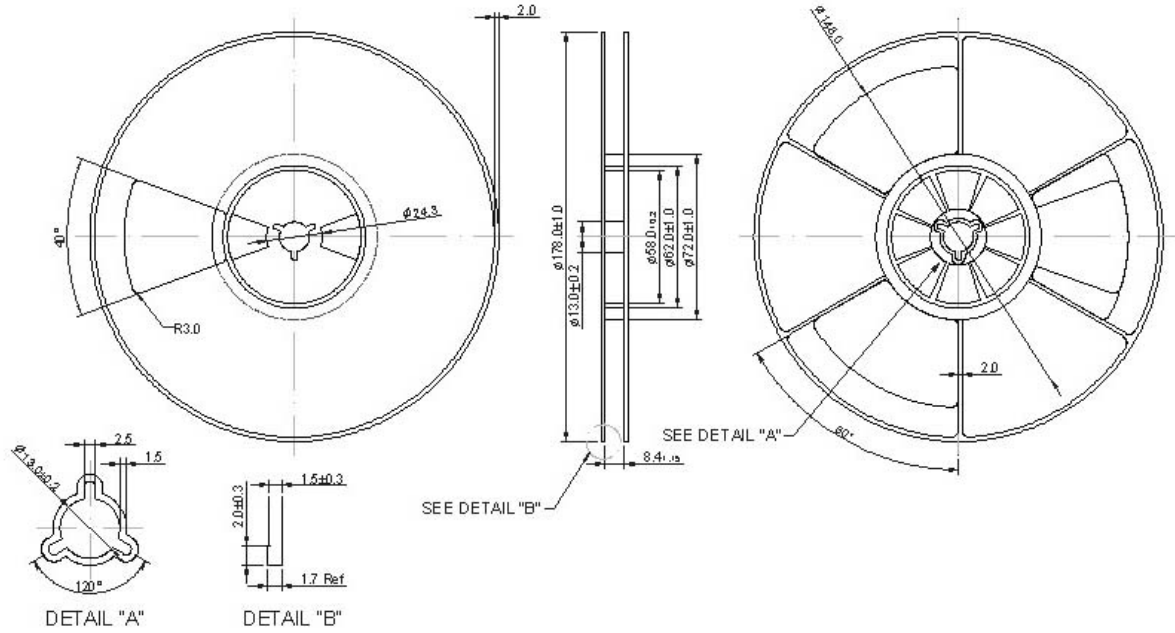
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R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

PCB Footprint :

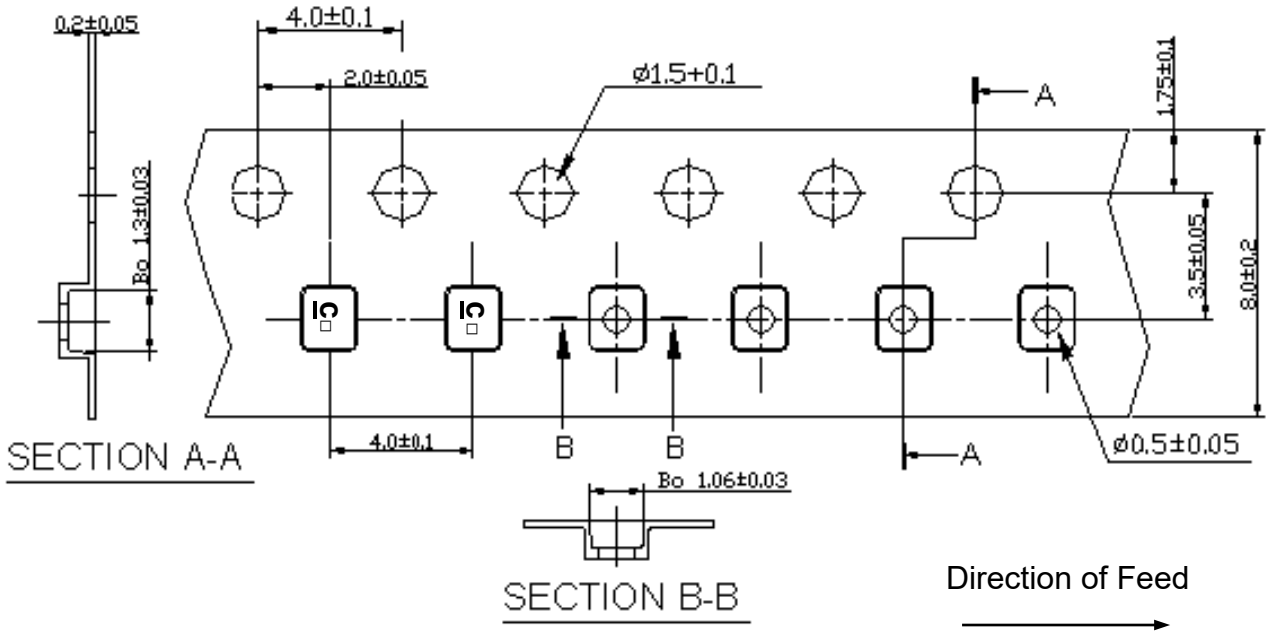


PACKING:
REEL DIMENSION

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



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.

