

SF2711L

**2332.5 MHz
SAW Filter**



SM1109-5

MAXIMUM RATING:

- Input Power Level: 10 dBm
- DC Voltage : 6 V
- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +125°C
- ESD Machine Mode : 50V
- ESD Human Body Mode : 100V
- Moisture Sensitive Level (MSL): Level 2a

ELECTRICAL CHARACTERISTICS:

Temperature range for specification : $T_{spec} = -40^{\circ}\text{C}$ to $+105^{\circ}\text{C}$

Terminating source impedance : $Z_s = 50\ \Omega$

Terminating load impedance : $Z_L = \text{balanced } 100\ \Omega$

Item	Unit	Min.	Typ.	Max.
Center Frequency F_c	MHz	-	2332.5	-
Min. Insertion Loss (2320~2345 MHz)	dB	-	1.6	-
Max. Insertion Loss (2320~2345 MHz) IL	dB		1.8	2.8 ¹⁾
Max. Insertion Loss (2320~2345 MHz) IL	dB	-	1.8	3.2
Amplitude Ripple (2320~2345 MHz)	dB _{p-p}	-	0.3	1.3 ¹⁾
Amplitude Ripple (2320~2345 MHz)	dB _{p-p}	-	0.5	1.7
Min. Input Return Loss (2320~2345 MHz)	dB	9	13	-
Min. Output Return Loss (2320~2345 MHz)	dB	9	12	-
Variation of amplitude imbalance (2320~2345 MHz)	dB	-2 ¹⁾	0.3	2.5 ¹⁾
Variation of amplitude imbalance (2320~2345 MHz)	dB	-5	-0.5	3.5
Variation of phase imbalance (2320~2345 MHz)	deg	-12 ¹⁾	-5	12 ¹⁾
Variation of phase imbalance (2320~2345 MHz)	deg	-15	-5	15
Attenuation (refer to min. IL)				
88 ~ 880 MHz	dB	50	67	-
880 ~ 1710 MHz	dB	41	59	-
1710 ~ 1910 MHz	dB	40	55	-
1910 ~ 2090 MHz	dB	39	55	-

2090 ~ 2190 MHz	dB	35	45	-
2190 ~ 2250 MHz	dB	30	45	-
2250 ~ 2275 MHz	dB	11	40	-
2300 MHz	dB	-	4	-
2305 MHz	dB	-	2.7	-
2310 MHz	dB	-	1	-
2315 MHz	dB	-	0.5	-
2350 MHz	dB	-	0.5	-
2355 MHz	dB	-	1	-
2360 MHz	dB	-	1.5	-
2365 MHz	dB	-	2.5	-
2390 MHz	dB	-	10	-
2400 ~ 2425 MHz	dB	13	22	-
2425 ~ 2500 MHz	dB	30	33	-
2500 ~ 2600 MHz	dB	35	41	-
2600 ~ 2800 MHz	dB	40	47	-
2800 ~ 3000 MHz	dB	38	51	-
3000 ~ 4000 MHz	dB	33	49	-
4000 ~ 4800 MHz	dB	29	50	-
4800 ~ 6000 MHz	dB	25	44	-
Group Delay Variation (2320~2345 MHz) GDV	ns	-	3	15 ¹⁾
Group Delay Variation (2320~2345 MHz) GDV	ns	-	4	20
Package size	mm	SMD 1.1x0.9		

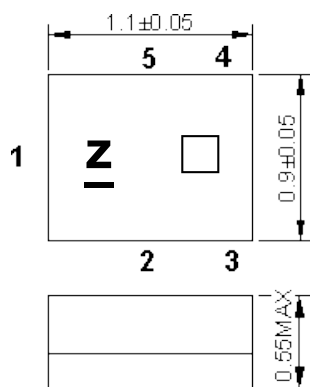
1) Valid for temperature -20°C ~ +85°C
Insertion Loss include 0.05dB PCB loss



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.

OUTLINE DRAWING:

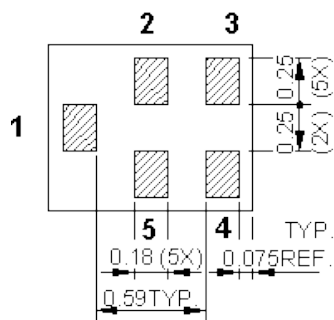


All tolerances are ± 0.05 mm unless otherwise specified

Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm



1 : Unbalanced Input

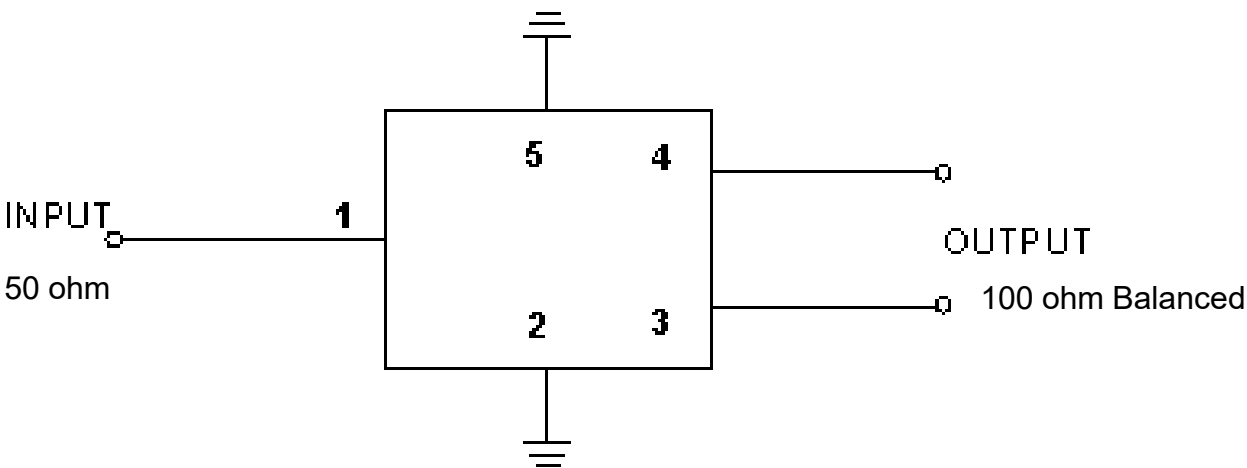
3, 4 : Balanced Output

2, 5 : Ground

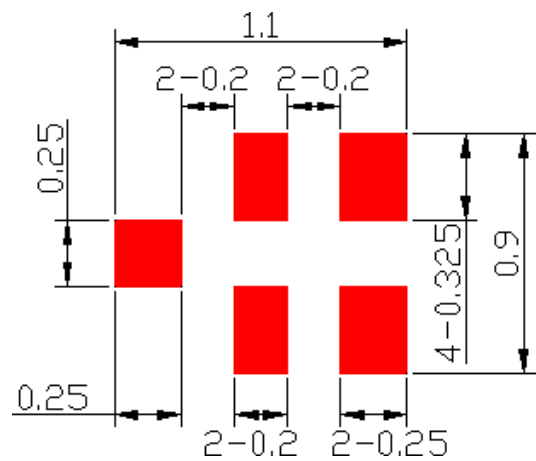
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z
2025	<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>
2026	<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>
2027	<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>
2028	<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>

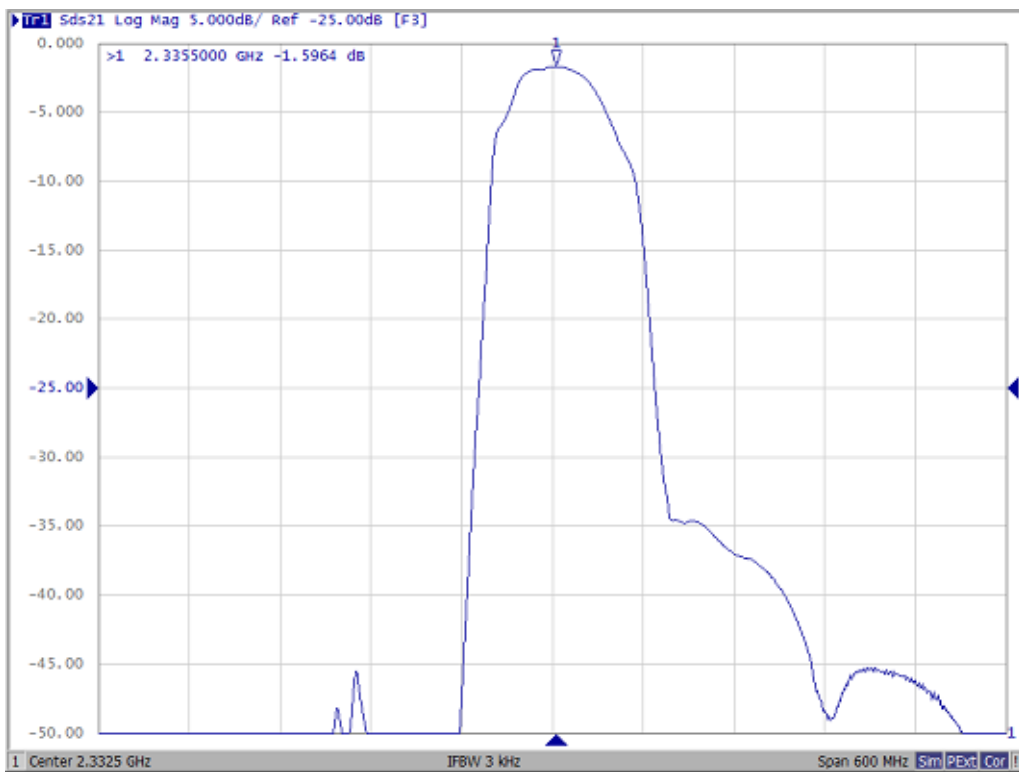
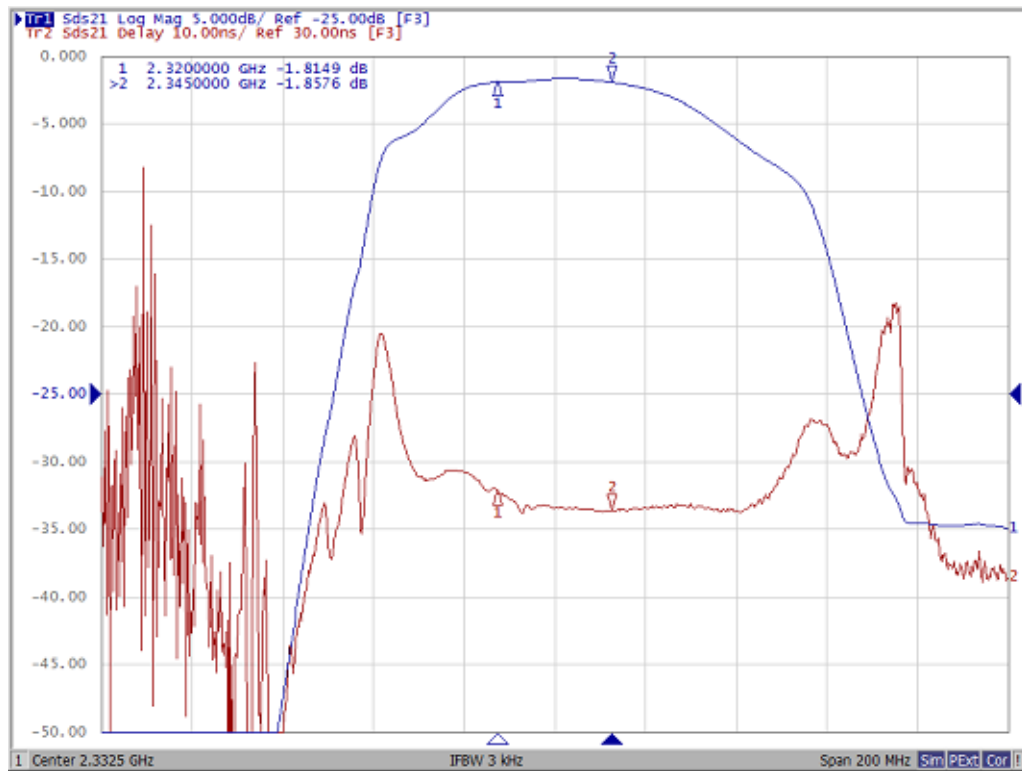
MEASUREMENT CIRCUIT:

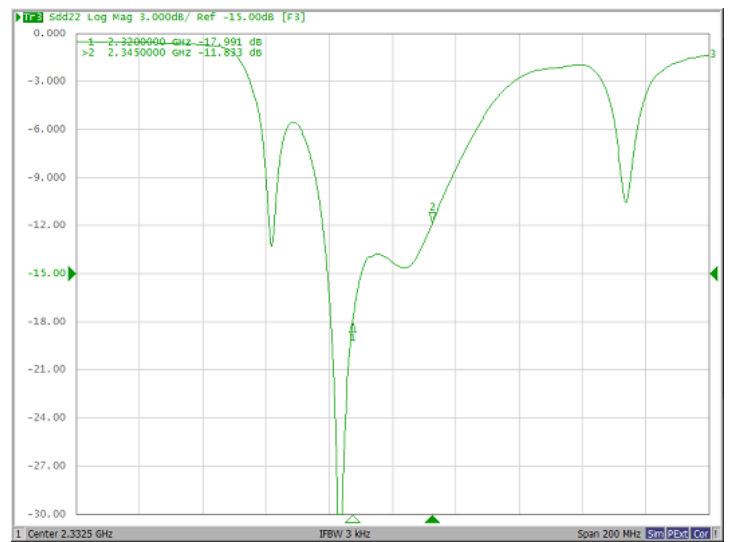
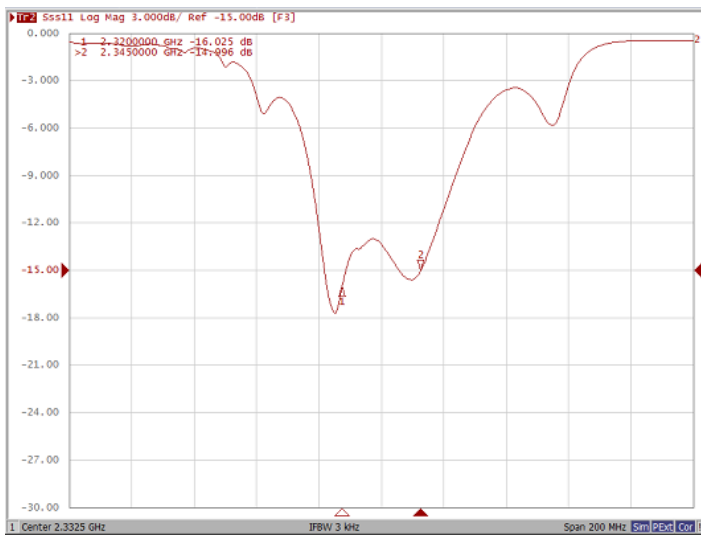
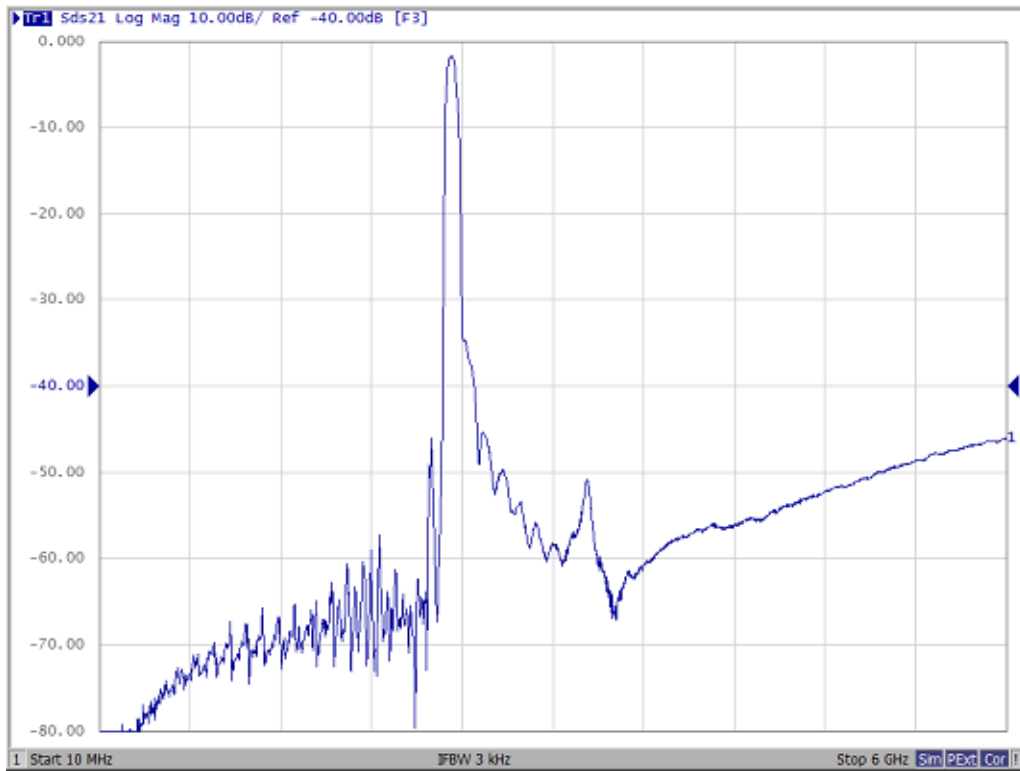


PCB Footprint:



Frequency Characteristics:





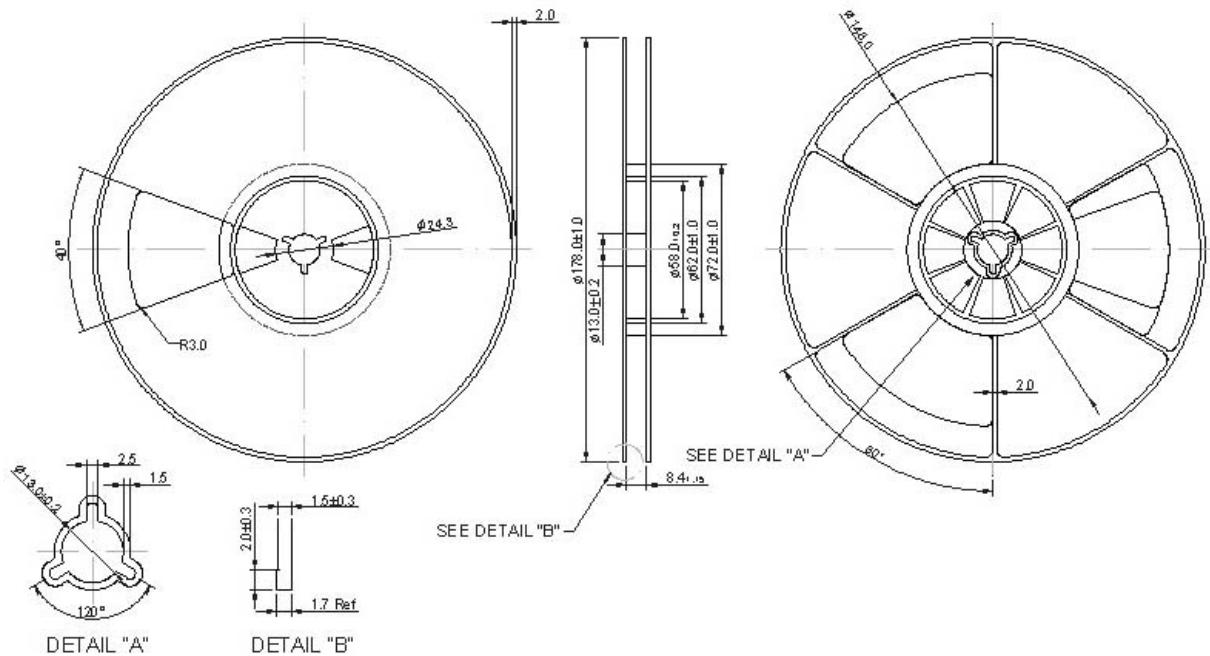
PACKING:

1. REEL DIMENSION

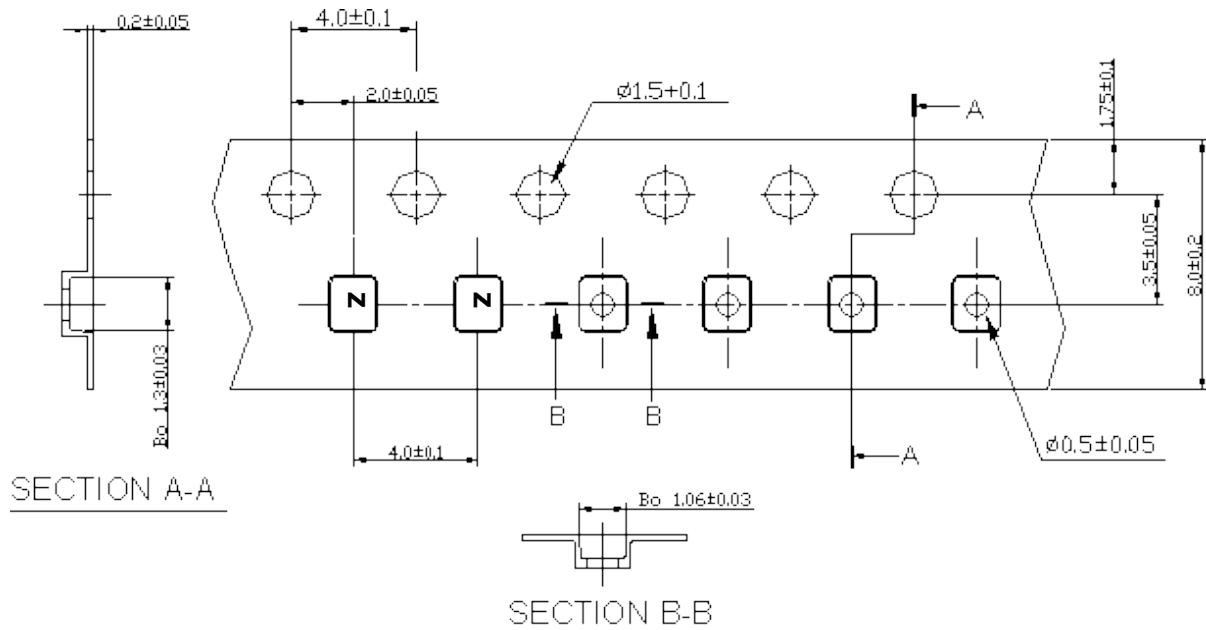
Reel Count:

7" = 3000

13" = 10,000



2. TAPE DIMENSION



Direction of Feed

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 245~260°C peak (min. 10sec).
4. Time : 2 times.

