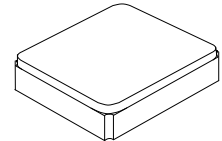


SF2739R

1582.47 MHz
SAW Filter



SM0907-4

- *RF Filter Designed for Front End GPS Applications*
- *Low Insertion Loss*
- *0.9 x 0.7 mm Surface-Mount Case*
- *Complies with Directive 2002/95/EC (RoHS)*
- *MSL Level: 3*

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+15	dBm
Maximum DC Voltage Between any Two Terminals	5	VDC
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile	260°C for 20-40 s	

Electrical Characteristics

Source impedance $Z_S = 50 \Omega$
Load impedance $Z_L = 50 \Omega$

Characteristic		Sym	Notes	Min	Typ	Max	Units
Center Frequency		f_C		1582.47			MHz
Insertion Loss	1559.05 to 1605.89 MHz	IL_{MAX}			2.2	2.6	dB
Insertion Loss	1574.39 to 1576.45 MHz @ 25°C				1.7	2.0	
Insertion Loss	1559.05 to 1563.15 MHz @ 25°C				2.0	2.4	
Insertion Loss	1597 to 1605.89 MHz @ 25°C				2.1	2.4	
Amplitude Ripple	1559.05 to 1605.89 MHz				0.6	1.5	dB
VSWR	1559.05 to 1605.89 MHz				2.3	2.6	
Attenuation (Reference to 0 dB)							
	10 to 960 MHz			31	37		dB
	1427 to 1463 MHz			30	34		
	1710 to 1850 MHz			26	29		
	1850 to 1985 MHz			30	35		
	2025 to 2305 MHz			30	33		
	2400 to 2570 MHz			30	33		
	3300 to 3800 MHz			18	23		
	4400 to 4900 MHz			15	18		
	5150 to 5925 MHz			13	17		
Temperature Coefficient of Frequency		ppm/°C			-36		

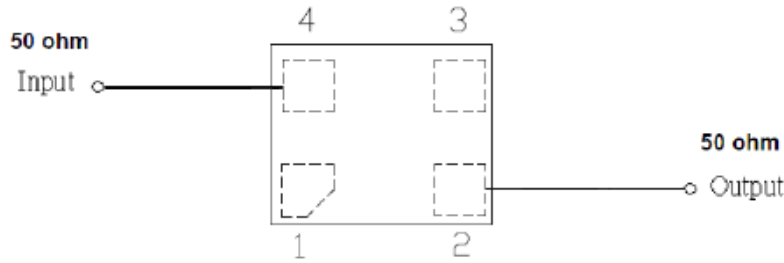
Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Case Style	SM0907-4
Lid Symbolization (Y=year, W=week)	n, <u>YW</u>

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

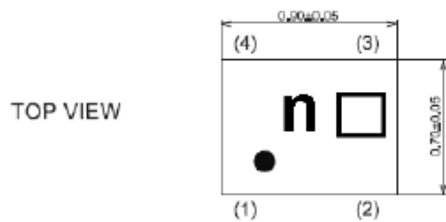
NOTES:

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.

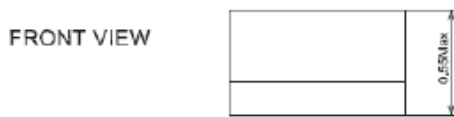
Matching Circuit



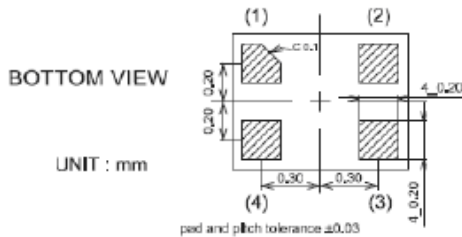
Outline Drawing



All tolerances are +/-0.05 mm unless otherwise specified
 Coplanarity : 0.1 mm max.
 1 to 4 : Pin No.
 Unit : mm

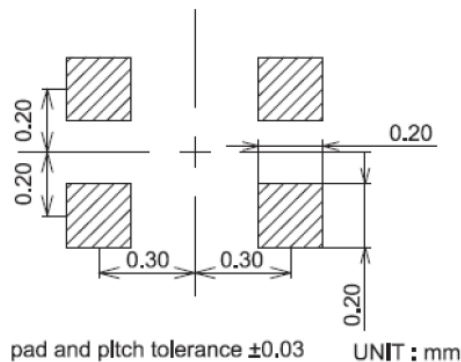


Pin No.	Symbol	Function
1	GND	Ground
2	OUT	Output
3	GND	Ground
4	IN	Input

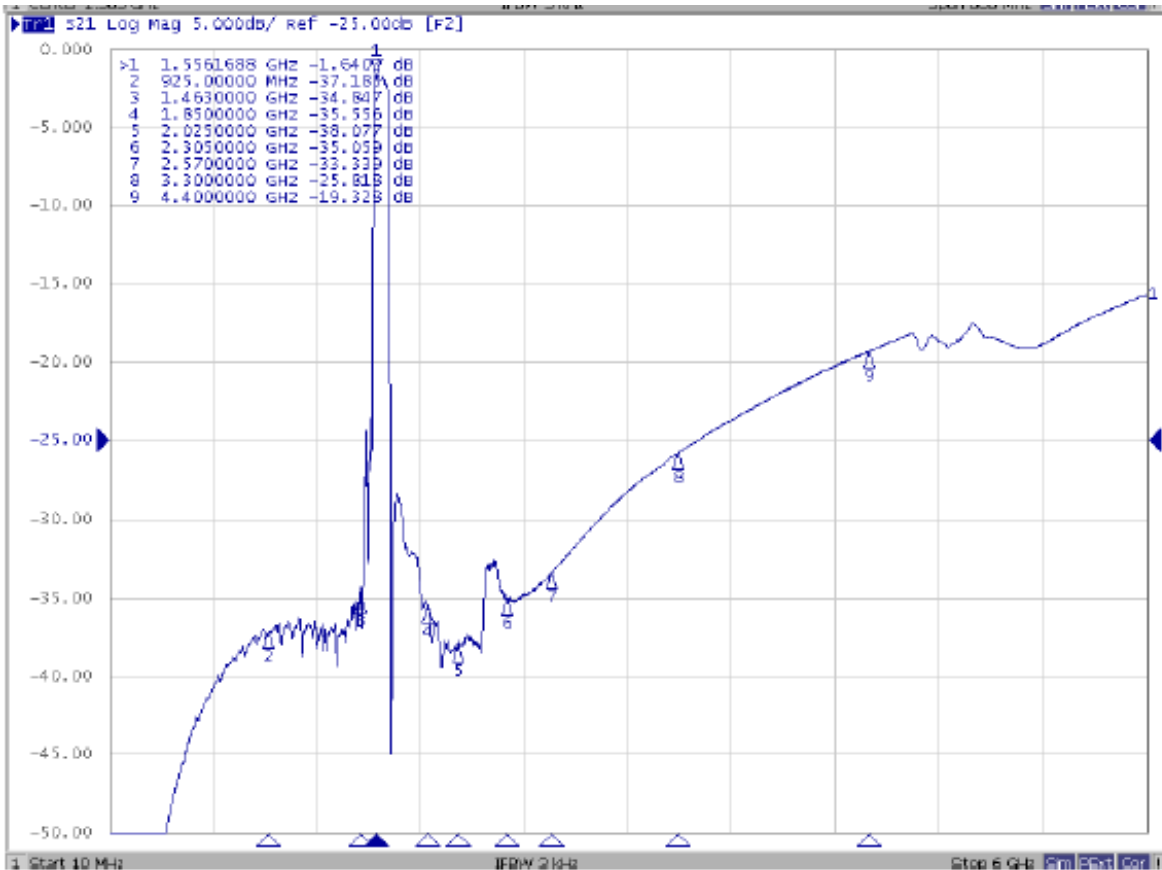
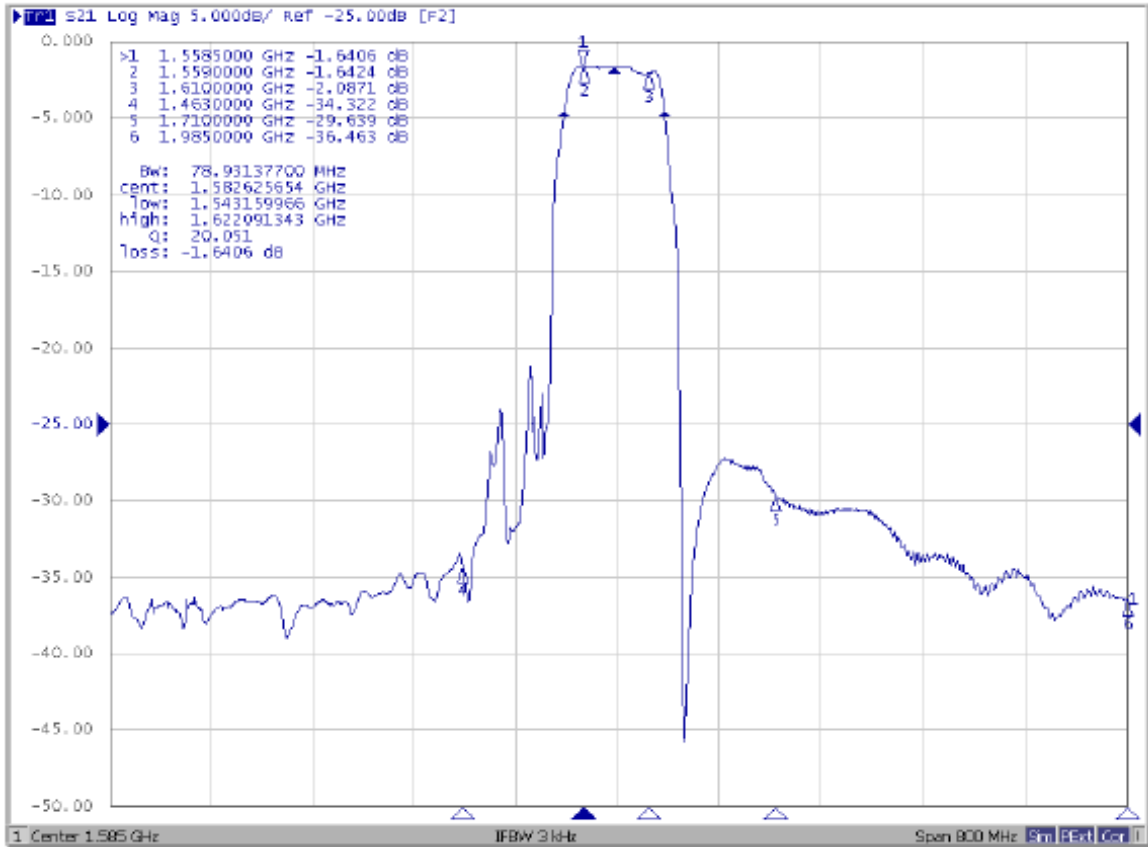


Year/Month	1	2	3	4	5	6	7	8	9	10	11	12
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z
2025	A	B	C	D	E	F	G	H	J	K	L	M
2026	N	P	Q	R	S	T	U	V	W	X	Y	Z
2027	a	b	c	d	e	f	g	h	i	k	l	m
2028	n	p	q	r	s	t	u	v	w	x	y	z

PCB Footprint



Frequency Characteristics

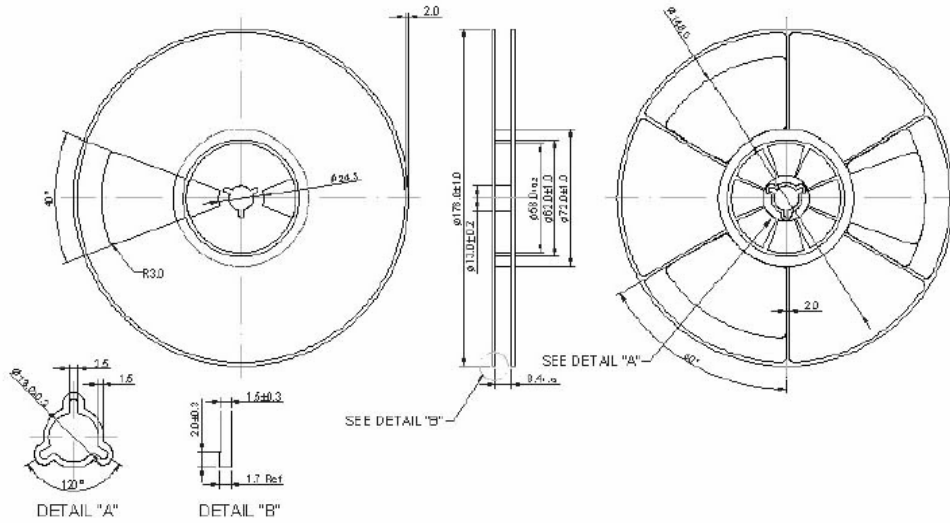


Tape and Reel Standard per ANSI/EIA-481

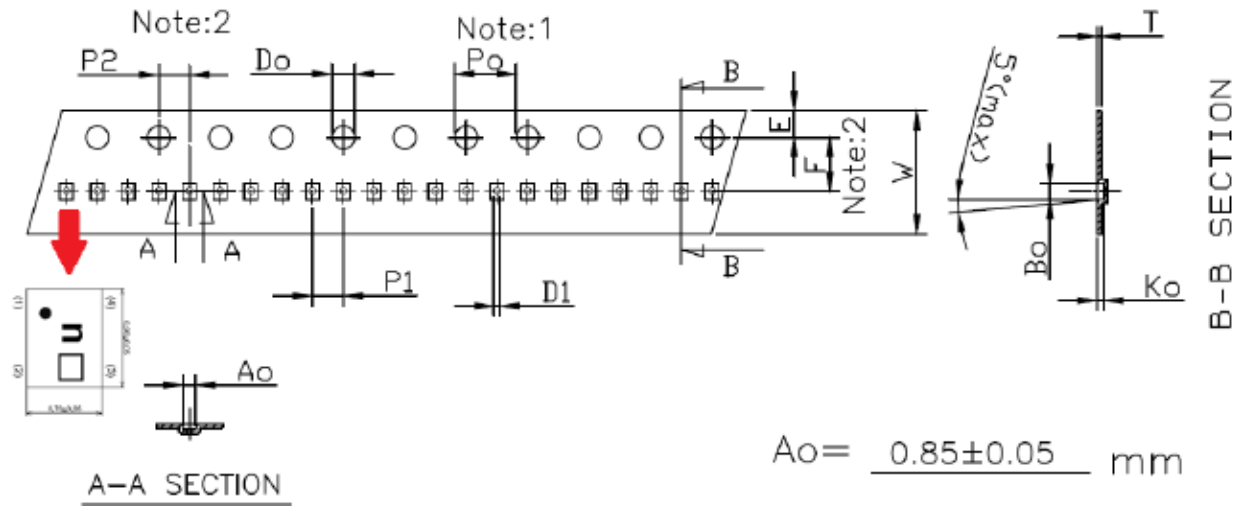
F. PACKING:

1. REEL DIMENSION

(Reel Count : 7"=2000 typ. ; 13"=10000 typ.)



2. TAPE DIMENSION



$A_o = \underline{0.85 \pm 0.05} \text{ mm}$

$B_o = \underline{1.05 \pm 0.05} \text{ mm}$

$K_o = \underline{0.62 \pm 0.05} \text{ mm}$

Unit: mm

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 (20-40 sec).
4. Time: 2 times maximum.

