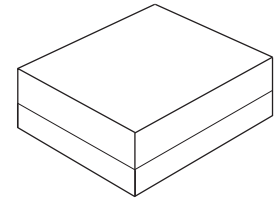


- **Miniature High Performance SAW Filter**
- **Low Passband Loss**
- **Hermetic 1.4 x 1.1 mm Surface-mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 3**
- **AEC-Q200 Qualified**

SF2506K

**2450 MHz
SAW Filter**



SM1411-5

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+28	dBm
Maximum DC Voltage On any Non-ground Terminal	3	VDC
Component Operating Temperature Range	-40 to +105	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Temperature Profile (5 cycles maximum)	265 °C for 10 s	

Electrical Characteristics

Terminating source impedance: $Z_s = 50 // 3nH \Omega$

Terminating load impedance: $Z_L = 50 // 2.7nH \Omega$

Characteristic	Sym	Unit	Min.	Typ.	Max.
Center Frequency	Fc	MHz	-	2450	-
Insertion Loss (2400~2500 MHz)	IL	dB	-	1.6	2.7
Amplitude Ripple (2400~2500 MHz)		dB	-	0.4	1.6
VSWR within (2400~2500 MHz)		dB	-	1.4	2.4
Attenuation (Reference level from 0 dB)					
DC~960 MHz		dB	35	55	-
960~1570 MHz		dB	35	42	-
1570~1580 MHz		dB	35	41	-
1580~1710 MHz		dB	35	40	-
1710~1910 MHz		dB	30	35	-
1910~1980 MHz		dB	30	36	-
2110~2170 MHz		dB	30	35	-
2640~3000 MHz		dB	21	31	-
3000~4800 MHz		dB	23	32	-
4800~5000 MHz		dB	20	35	-
5000~6000 MHz		dB	20	32	-

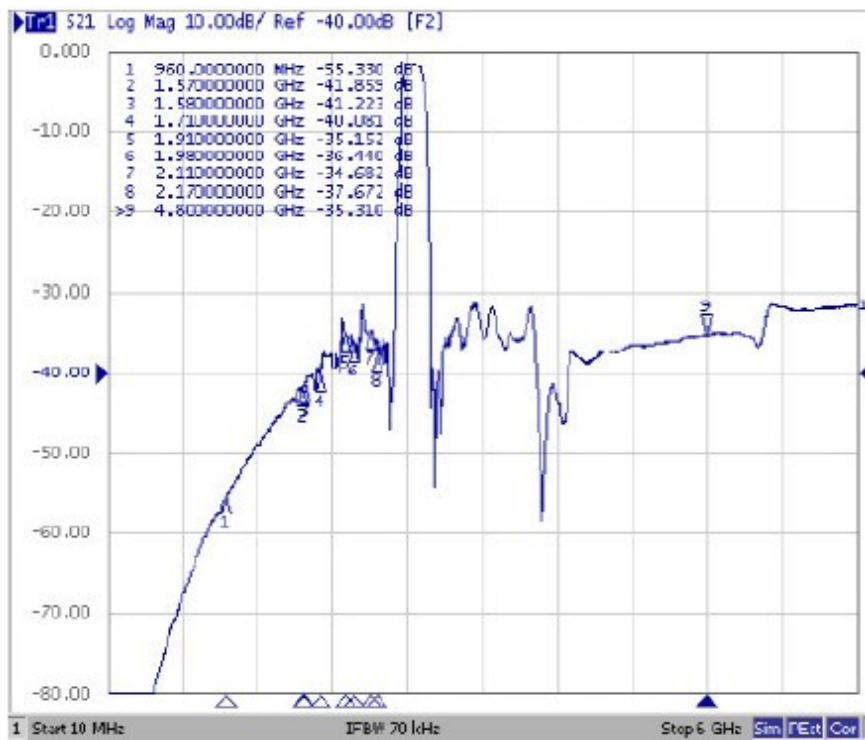
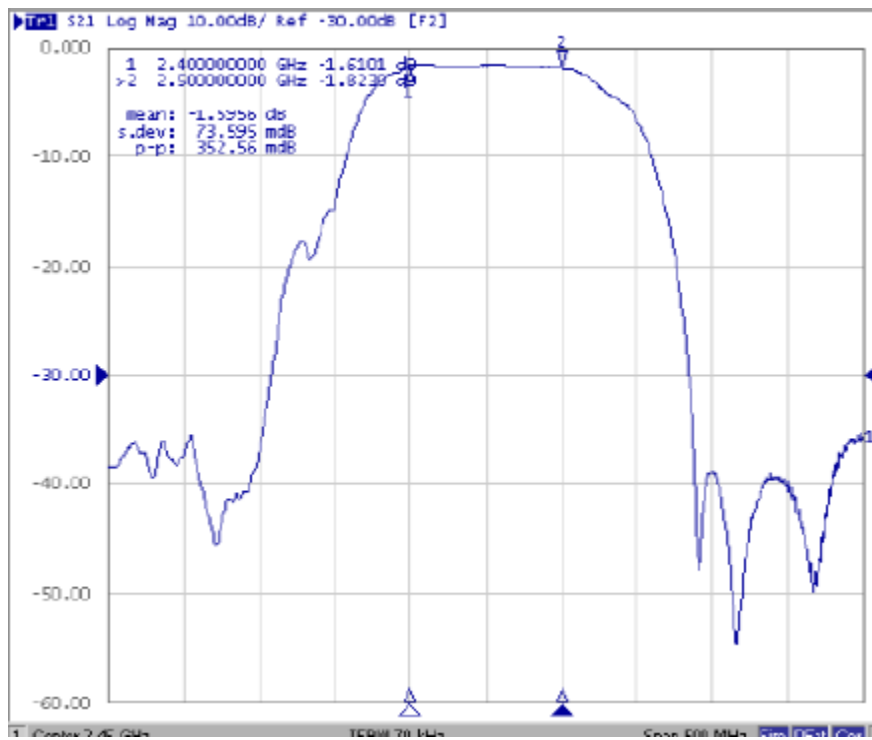
Case Style	SM1411-5
Lid Symbolization	E

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

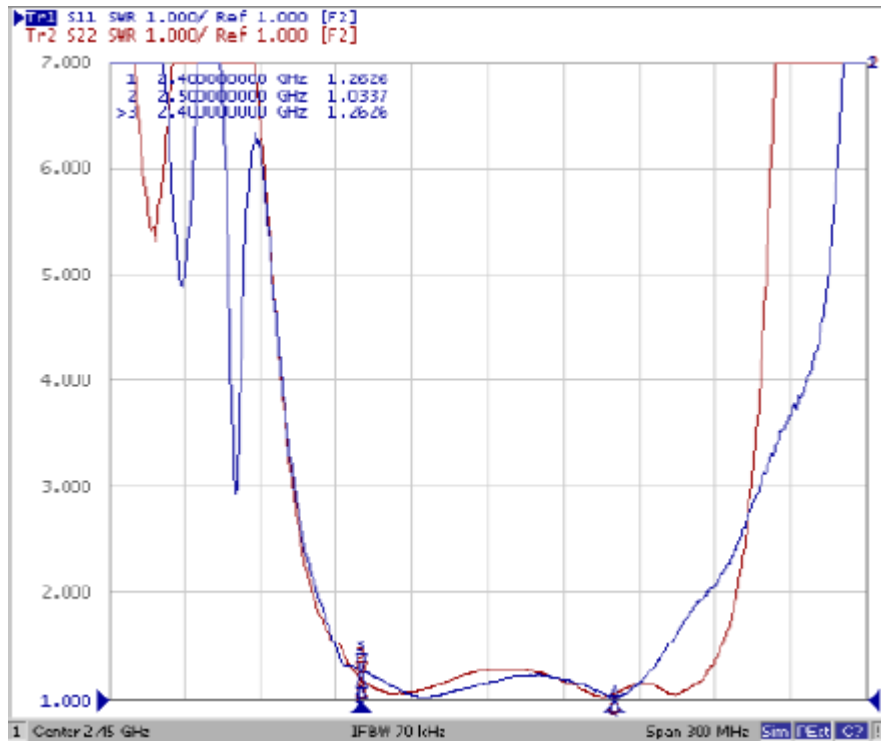
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

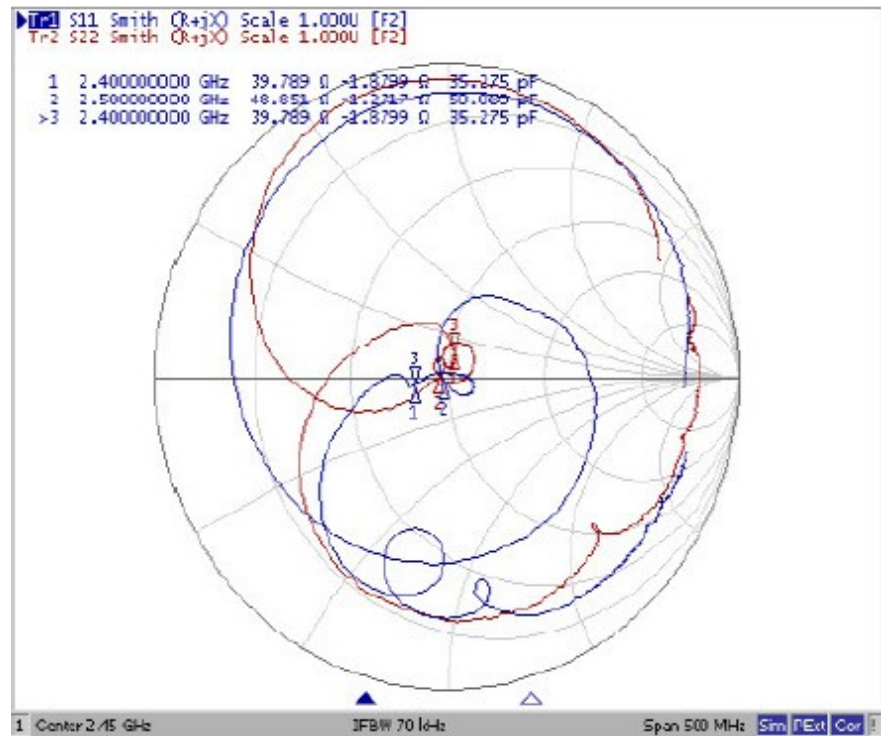


Reflection Functions

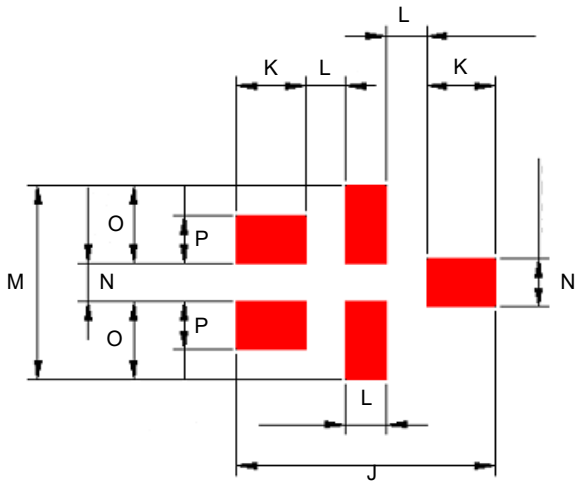
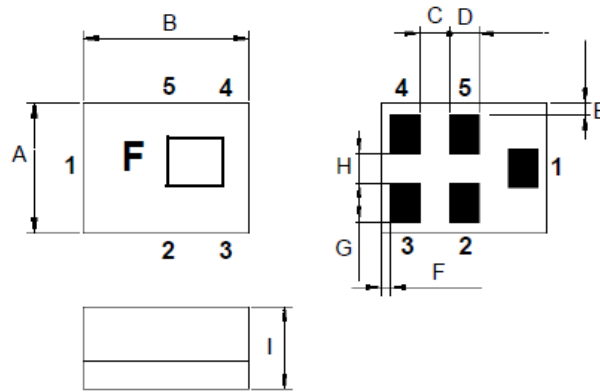
VSWR



Smith Chart



SM1411-5 1.4 X 1.1 mm 5-Terminal Surface-mount Case



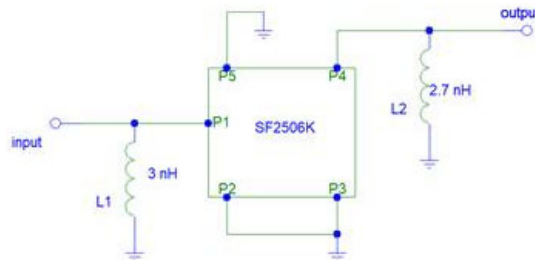
PCB Footprint

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	1.10	-	-	0.043	-
B	-	1.40	-	-	0.055	-
C	-	0.25	-	-	0.009	-
D	-	0.25	-	-	0.009	-
E	-	0.10	-	-	0.003	-
F	-	0.075	-	-	0.002	-
G	-	0.325	-	-	0.012	-
H	-	0.25	-	-	0.009	-
I	-	-	0.700	-	-	0.027
J	-	1.60	-	-	0.062	-
K	-	0.425	-	-	0.016	-
L	-	0.25	-	-	0.009	-
M	-	1.30	-	-	0.051	-
N	-	0.325	-	-	0.012	-
O	-	0.525	-	-	0.020	-
P	-	0.325	-	-	0.012	-

Materials

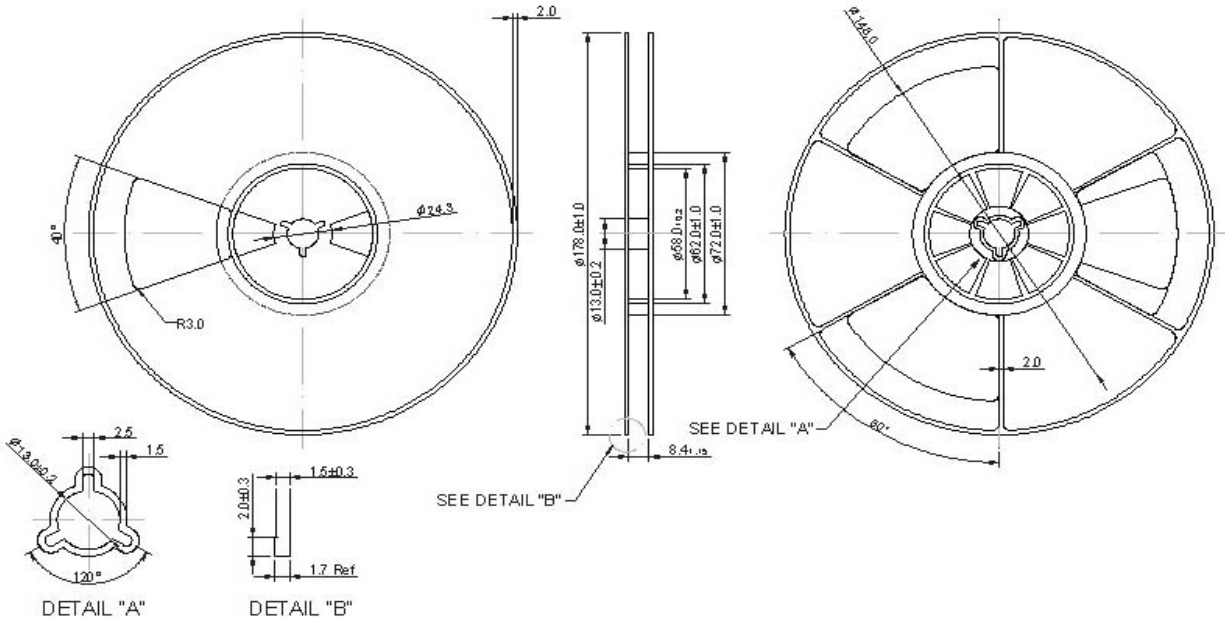
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel
Body	Epoxy Resin

Test Circuit

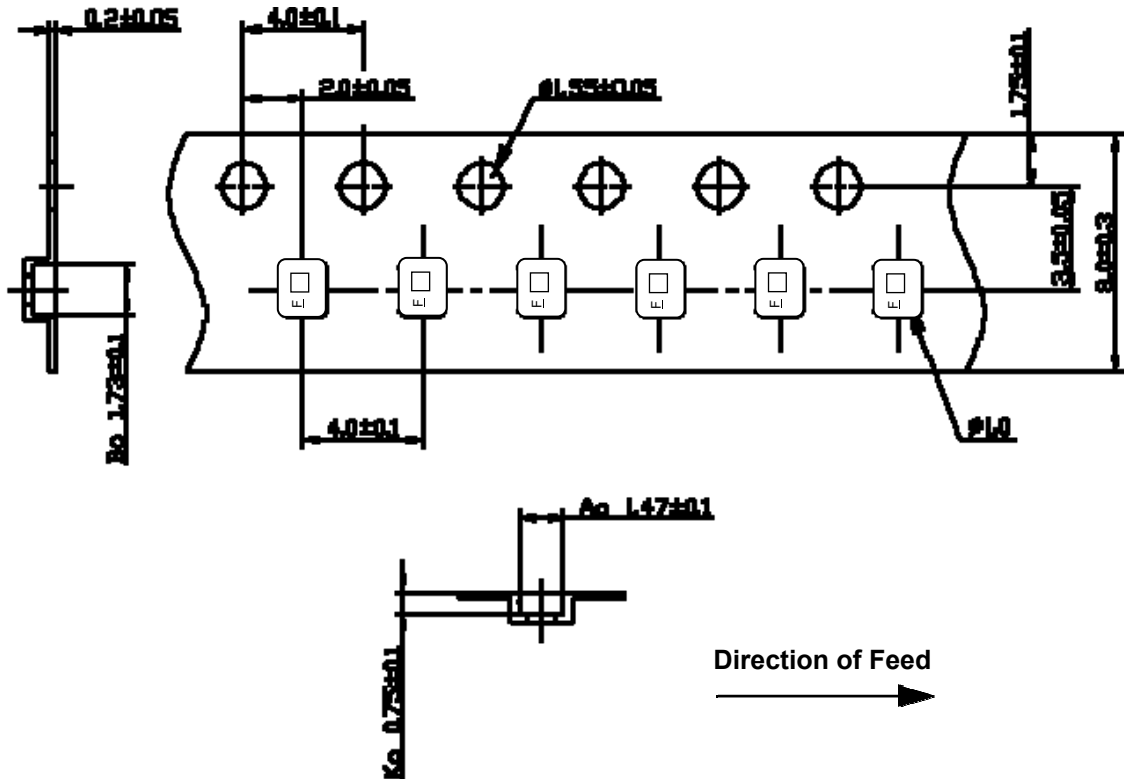


Reel Dimensions - 7 inch Reel, 3000 Filters

Tape and Reel Standard per ANSI/EIA-481



Tape Dimensions



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.

