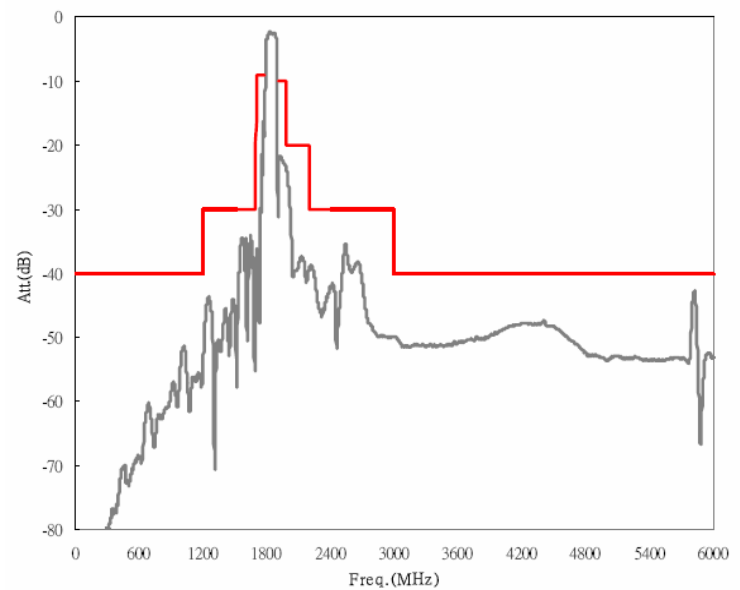
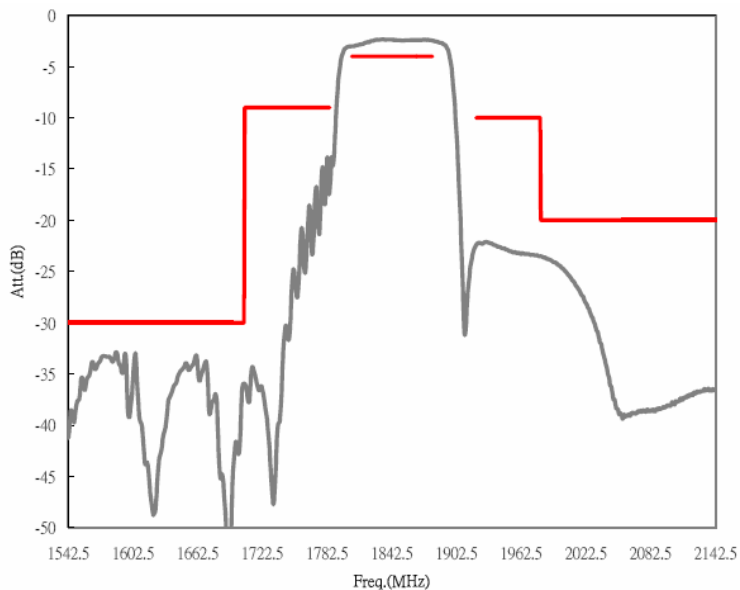


DESCRIPTION

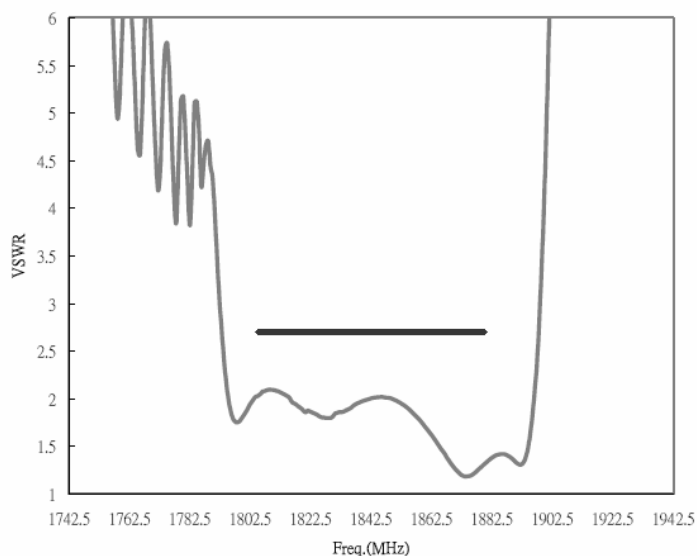
- 1842.5 MHz SAW bandpass filter with 75 MHz bandwidth for mobile communications.
- 2.5 x 2.0 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

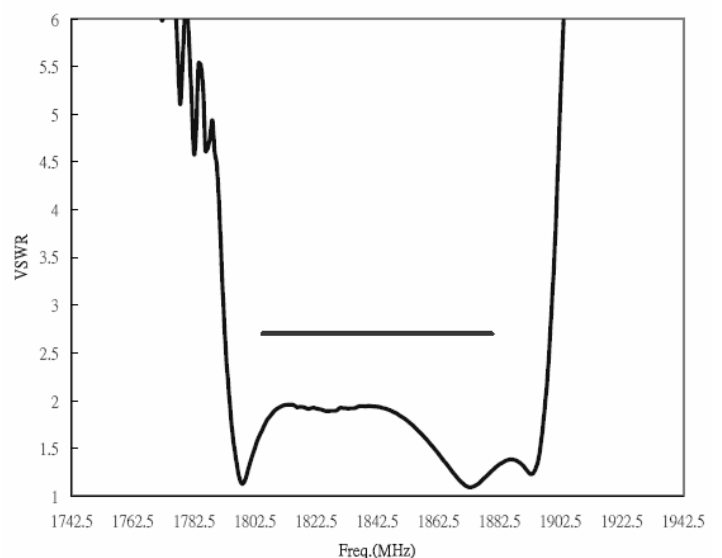
Frequency Response



VSWR (Unbalanced Input)



VSWR (Balanced Output)



SPECIFICATION

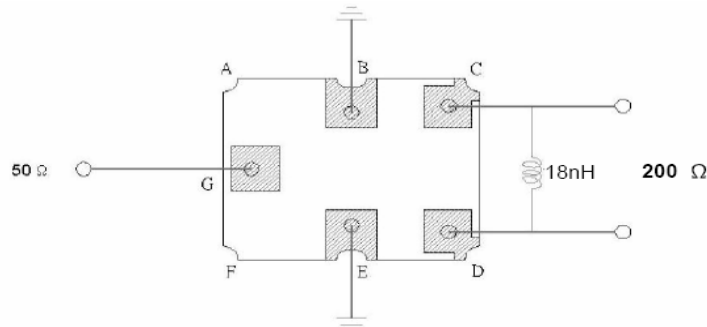
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	-	1842.5	-	MHz
Insertion Loss (1805 to 1880 MHz)	-	2.9	4.0	dB
Amplitude Ripple (1805 to 1880 MHz)		1.0	2.1	dB p-p
Input VSWR (1805 to 1880 MHz)	-	2.1	2.7	:1
Output VSWR (1805 to 1880 MHz)	-	2.0	2.7	:1
Attenuation (1 to 1200 MHz) ²	40	49	-	dB
Attenuation (1200 to 1705 MHz) ²	30	34	-	dB
Attenuation (1705 to 1785 MHz) ²	9	14	-	dB
Attenuation (1920 to 1980 MHz) ²	10	22	-	dB
Attenuation (1980 to 2200 MHz) ²	20	23	-	dB
Attenuation (2200 to 3000 MHz) ²	30	36	-	dB
Attenuation (3000 to 6000 MHz) ²	40	44	-	dB
Output Amplitude Balance ($ S_{31} / S_{21} $)	-2	0	2	dB
Output Phase Balance ($\angle(S_{31}) - \angle(S_{21}) + 180^\circ$)	-12	0	12	deg
Source Impedance	50 ohms unbalanced			
Load Impedance	200 ohms balanced			
Ambient Temperature	-	25	-	°C

- Notes:
1. Fixed reference point.
 2. Reference level from 0 dB.
 3. Symmetry in band, referenced to the matched operating condition, 1805 to 1880 MHz).

MAXIMUM RATINGS

Parameter	Min	Typ	Max	Units
Storage Temperature Range	-40	25	85	°C
Operating Temperature Range	-20	25	75	°C
Input Power Level	-	10	13	dBm

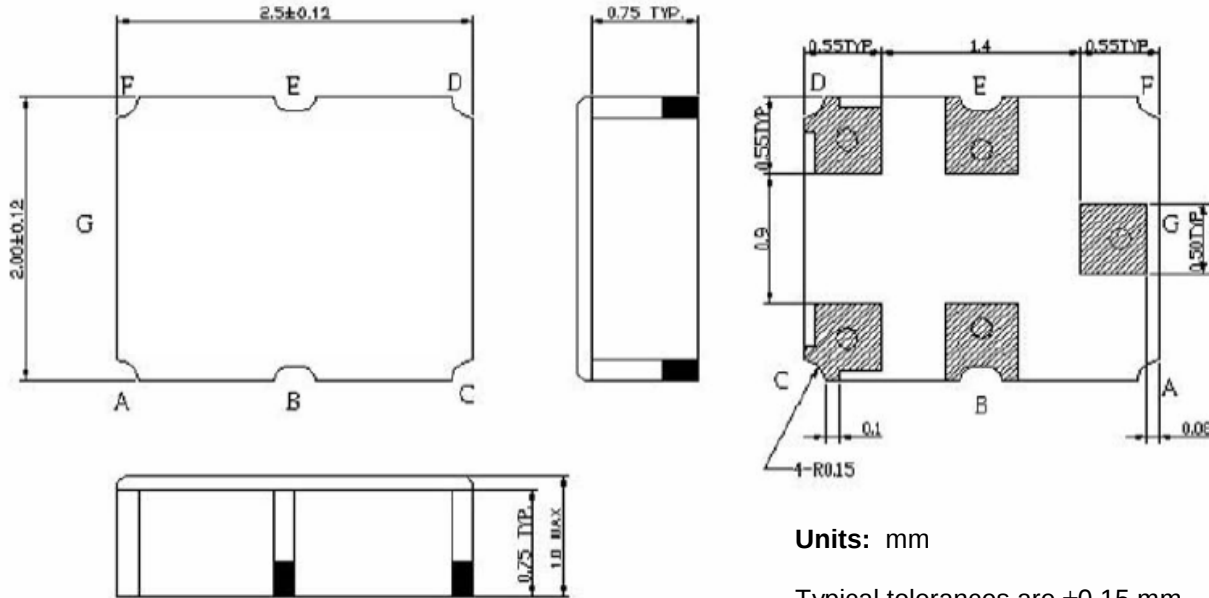
MATCHING CIRCUIT



Notes:

1. Recommend use of 2% tolerance matching component. Typical Inductor Q=45.
2. Component value is for reference only and may change depending on board layout.

PACKAGE OUTLINE



Package Material:
 Body: Al_2O_3 ceramic
 Lid: Kovar, Ni plated
 Terminations: Au plating 1 μ m min,
 over a 1.3-8.9 μ m Ni plating

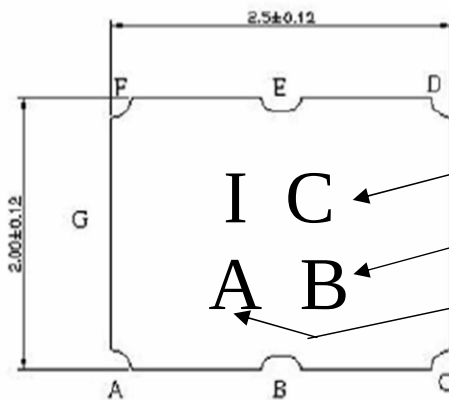
Units: mm

Typical tolerances are ± 0.15 mm
 except where indicated.

Pad Configuration:

Unbalanced Input: G
 Balanced Output: C
 Balanced Output: D
 Ground: B, E

MARKING



Model Identification: IC = SF1843BA02542S

Week Code: A through Z followed by a through z equals 52 weeks.

Year Code: A = 2001, B=2002, C=2003, to J=2010 (Code A through J repeats every 10 years)

ISO 9001
 Registered

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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