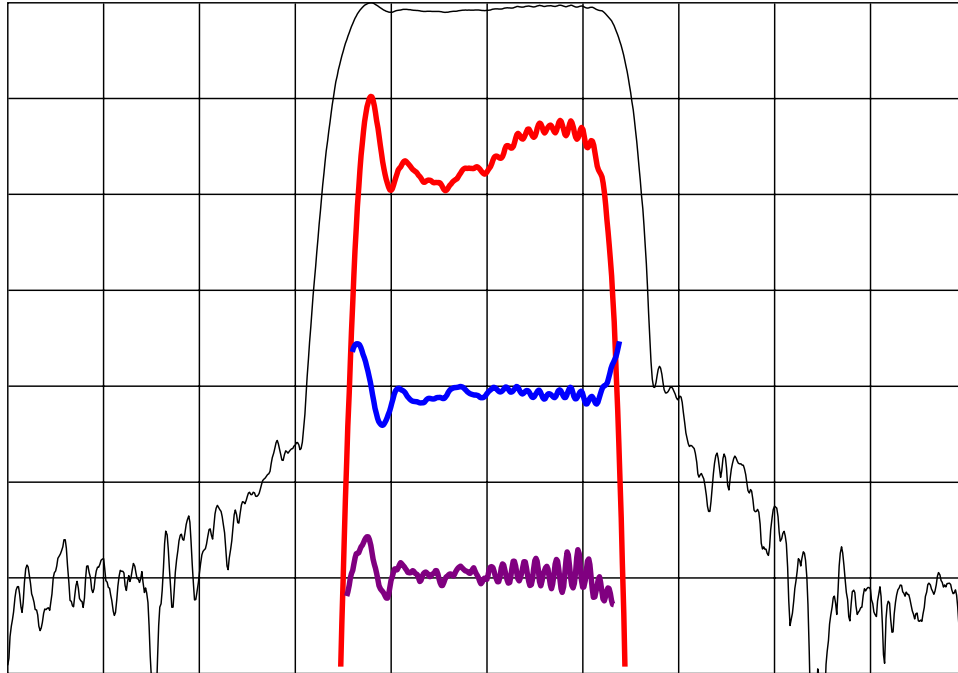


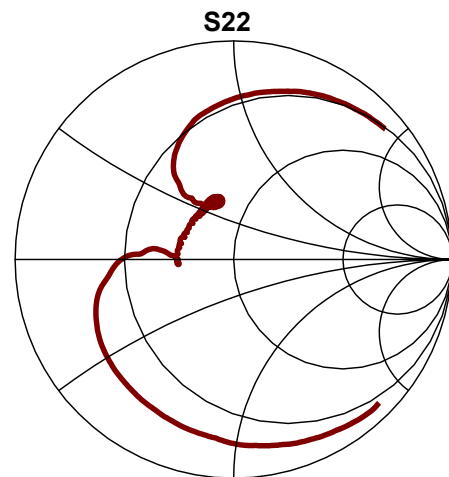
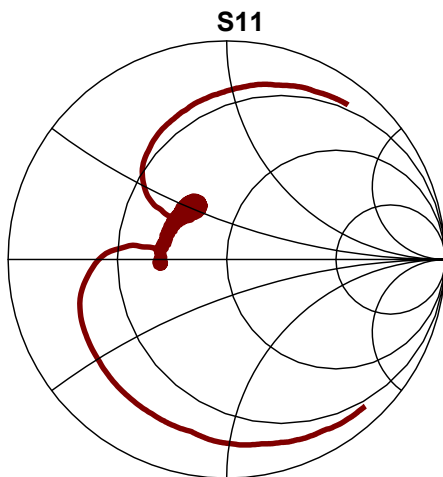
DESCRIPTION

- 70 MHz SAW bandpass filter with 10 MHz bandwidth.
- 13.3 x 6.5 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE



Horizontal: Frequency : 4 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation : 100 ns/div



SPECIFICATION

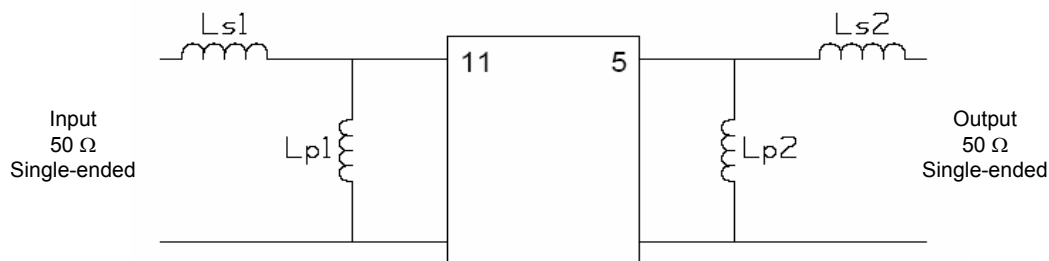
Parameter	Min	Typ	Max	Units
Center Frequency (F_{ref}) ¹	-	70.4	-	MHz
Insertion Loss	-	11.2	12.5	dB
Lower 1 dB Band Edge	-	65.1	65.4	MHz
Upper 1 dB Band Edge	75.4	75.7	-	MHz
Lower 40 dB Band Edge	62.6	63.0	-	MHz
Upper 40 dB Band Edge	-	77.7	78.2	MHz
Passband Ripple ²	-	1.1	1.5	dB p-p
Phase Linearity ²	-	8	11.5	deg p-p
Group Delay Variation ²	-	80	130	ns p-p
Absolute Delay	-	1.10	-	us
Rejection (20 to 62.6 MHz)	40	45	-	dB
Rejection (78.2 to 105 MHz)	38	41	-	dB
Source and Load Impedance	-	50	-	Ω
Temperature Coefficient of Frequency (T_c) ³	-	-90	-	ppm/ $^{\circ}$ C
Ambient Temperature (T_{ref})	-	25	-	$^{\circ}$ C

- Notes: 1. Average of lower and upper 3 dB frequencies.
2. Evaluated over 65.4 to 75.4 MHz.
3. Typical change of filter frequency response with temperature is $\Delta f = (T - T_{ref}) * T_c * F_{ref}$, in ppm

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}$ C
Input Power Level	-	10	dBm

MATCHING CIRCUIT



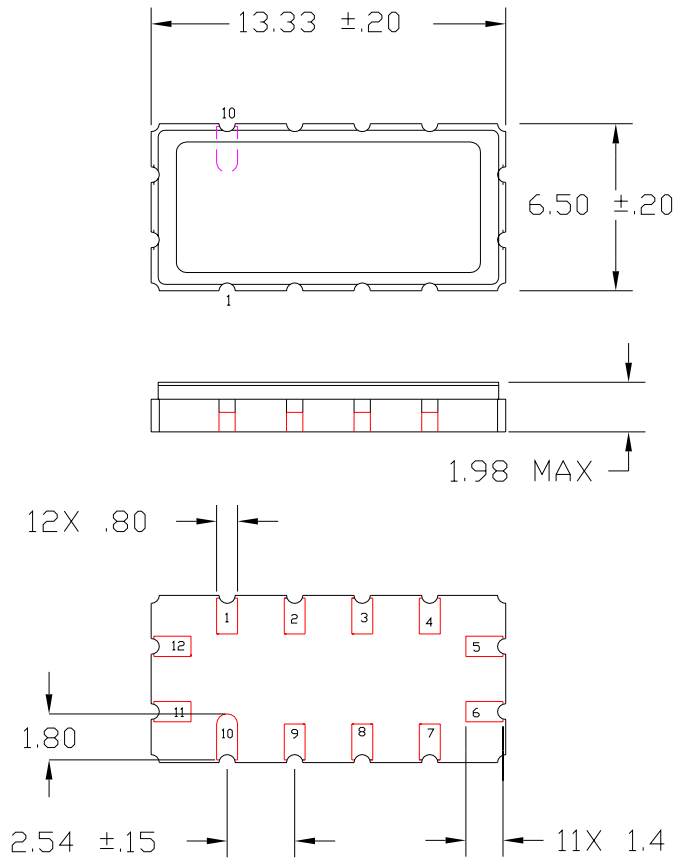
Typical component values:
(Minimum inductor Q = 45)

Ls1 =	820	nH	Ls2 =	1200	nH
Lp1 =	270	nH	Lp2 =	330	nH

Notes:

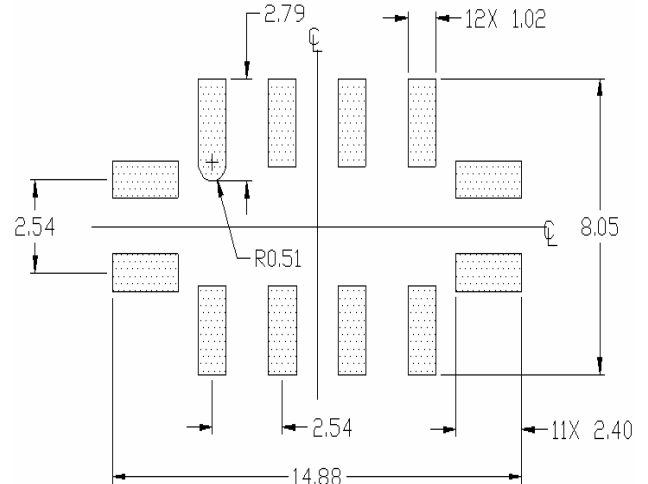
1. Recommend use of 2% tolerance matching components.
2. Component values shown are for guidance only and may change depending on board layout.

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

SUGGESTED FOOTPRINT

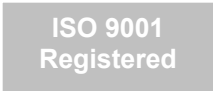


Units: mm

Tolerances are ± 0.15 mm except for the overall length and width, which are nominal values.

Pad Configuration:

Input: 11
Output: 5
Ground: 1,2,3,4,6,7,8,9,10,12



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