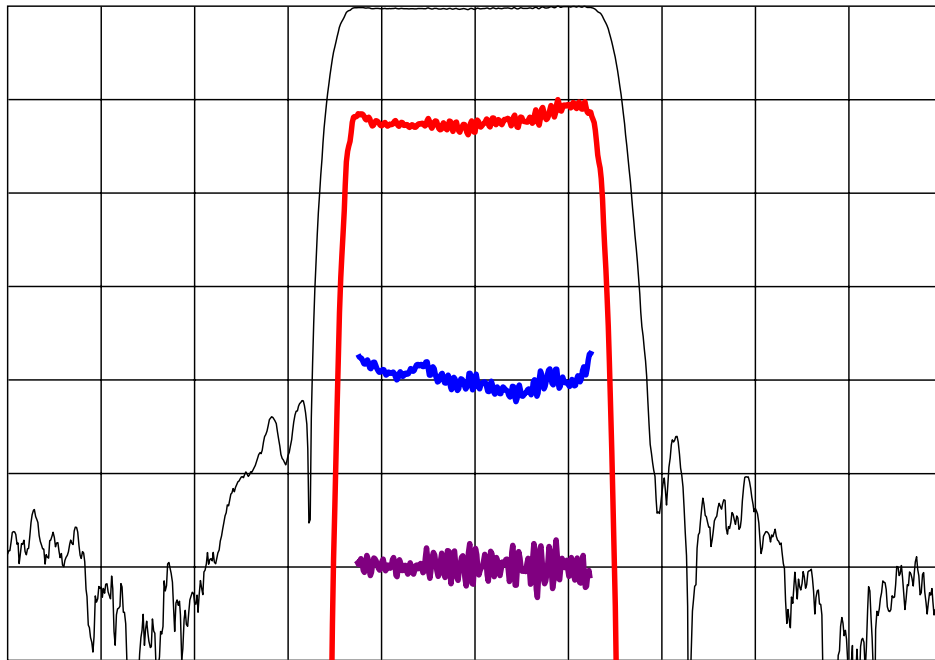


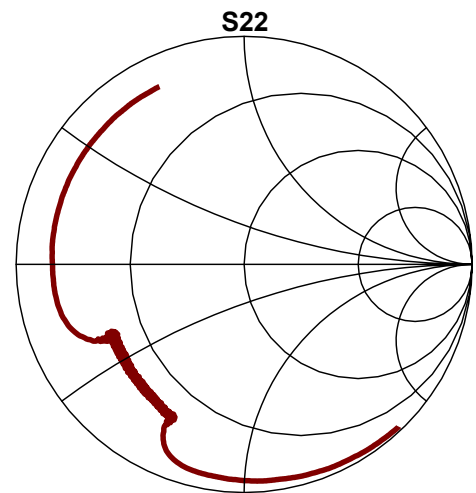
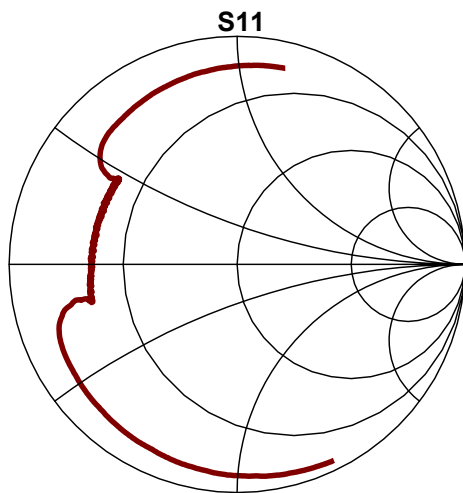
DESCRIPTION

- 72.5 MHz SAW bandpass filter with 20 MHz bandwidth.
- 13.3 x 6.5 mm SMP package.
- RoHS compliant.

TYPICAL PERFORMANCE



Horizontal: Frequency : 8 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 5 deg/div
 Group Delay : 50 ns/div



SPECIFICATION

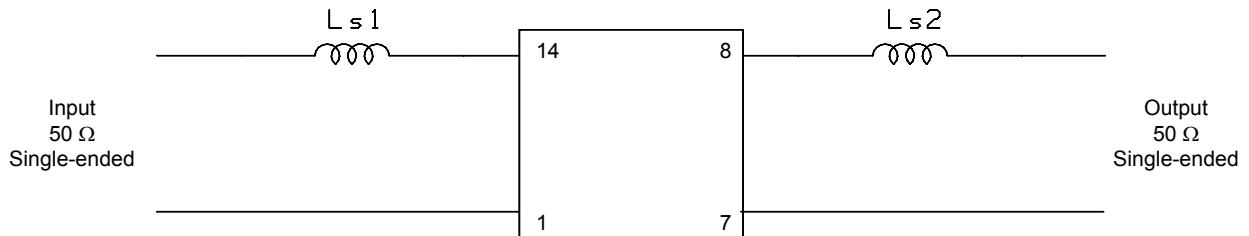
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	-	72.50	-	MHz
Insertion Loss at 72.5 MHz	-	16	17	dB
Lower 1 dB Frequency ²	-	61.20	62.50	MHz
Upper 1 dB Frequency ²	82.50	83.50	-	MHz
Lower 3 dB frequency ²	-	60.70	61.65	MHz
Upper 3 dB frequency ²	83.35	84.10	-	MHz
Passband Ripple ³	-	0.4	1.0	dB p-p
Phase Deviation from Linear	-	4	10	deg p-p
Group Delay Variation ⁴	-	30	150	ns p-p
Absolute Delay	-	1.09	-	μs
Rejection (10 to 58 MHz) ²	40	42	-	dB
Rejection (87.5 to 90 MHz) ²	35	41	-	dB
Rejection (90 to 125 MHz) ²	40	47	-	dB
Input Return Loss at 72.5 MHz	2	3.5	-	dB
Output Return Loss at 72.5 MHz	2	3.4	-	dB
Source and Load Impedance	-	50	-	Ω
Ambient Temperature (Tref)	-	25	-	°C

- Notes: 1. Average of lower and upper 3 dB band edge frequencies.
2. Evaluated over 62.5 to 82.5 MHz.
3. Specification is met over operating temperature range.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-10	70	°C
Input Power Level	-	10	dBm

MATCHING CIRCUIT



Typical component values:
(Minimum inductor Q = 45)

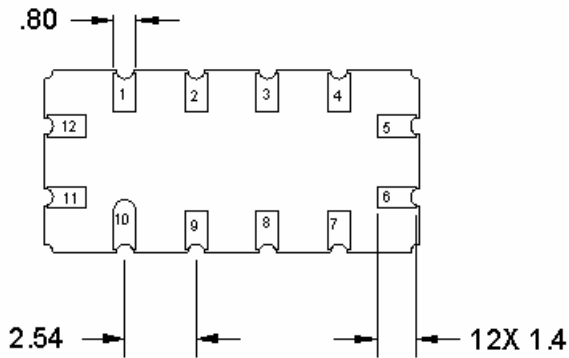
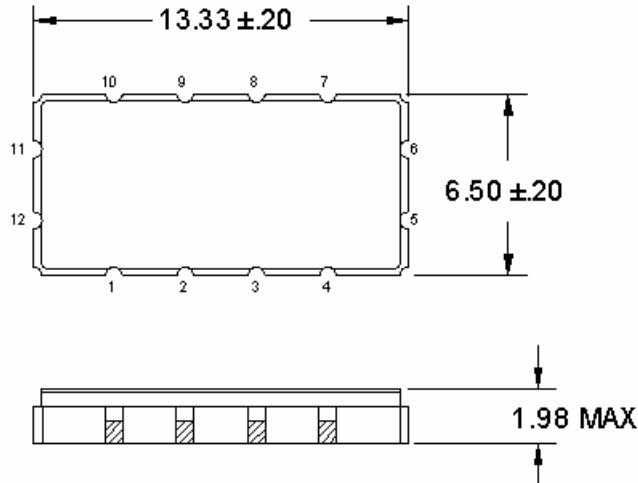
$$L_{s1} = 100 \text{ nH}$$

$$L_{s2} = 82 \text{ nH}$$

Notes:

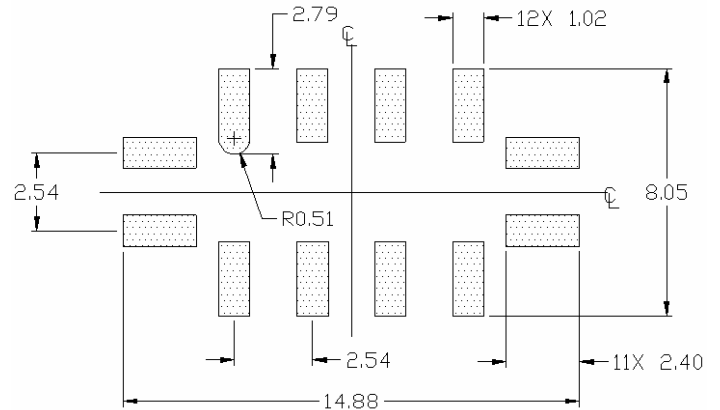
1. Recommend the use of +/-2% tolerance components.
2. Component values shown are for guidance only and may change depending on board layout.

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

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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