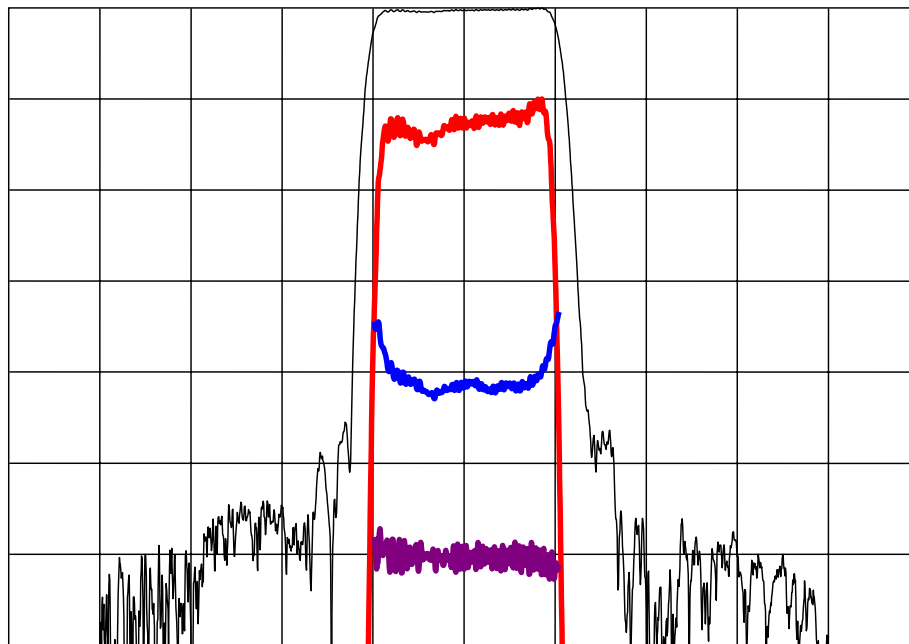


DESCRIPTION

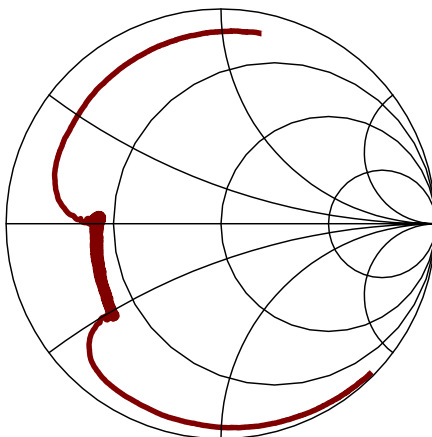
- 70 MHz SAW bandpass filter with 20 MHz bandwidth.
- 13.3 x 6.5 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE

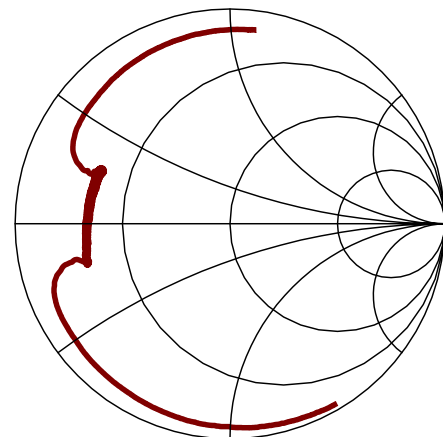


Horizontal: Frequency : 10 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation : 100 ns/div

S11



S22



SPECIFICATION

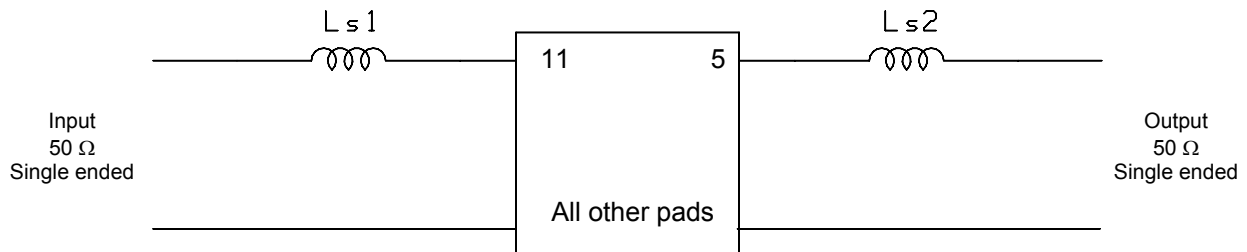
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	69.8	70	70.2	MHz
Insertion Loss	-	14.2	15.0	dB
1 dB Bandwidth	18.9	19.3	-	MHz
3 dB Bandwidth	20.0	20.4	-	MHz
40 dB Bandwidth	-	25.4	26.1	MHz
Passband Ripple	-	0.5	1.0	dB
Phase Deviation from Linear ²	-	5	11.2	deg
Group Delay Variation ²	-	55	90	ns
Absolute Delay	-	1.12	-	μs
Substrate	-	LiNbO ₃	-	-
Ambient Temperature (Tref)	-	25	-	°C
System Source and Load Impedance	-	50	-	Ω

- Notes:
1. Average of lower & upper 3 dB frequencies.
 2. Evaluated over 90% of the 3 dB bandwidth.
 3. Typical change of filter frequency response with temperature is $\Delta f = (T - T_{ref}) * T_c * F_c$, in ppm.

MAXIMUM RATINGS

Parameter	Min	Typ	Max	Units
Storage Temperature Range	-40	25	85	°C
Temperature Coefficient of Frequency (Tc) ³	-	-90	-	ppm/°C
Input Power Level	-	0	+20	dBm

MATCHING CIRCUIT

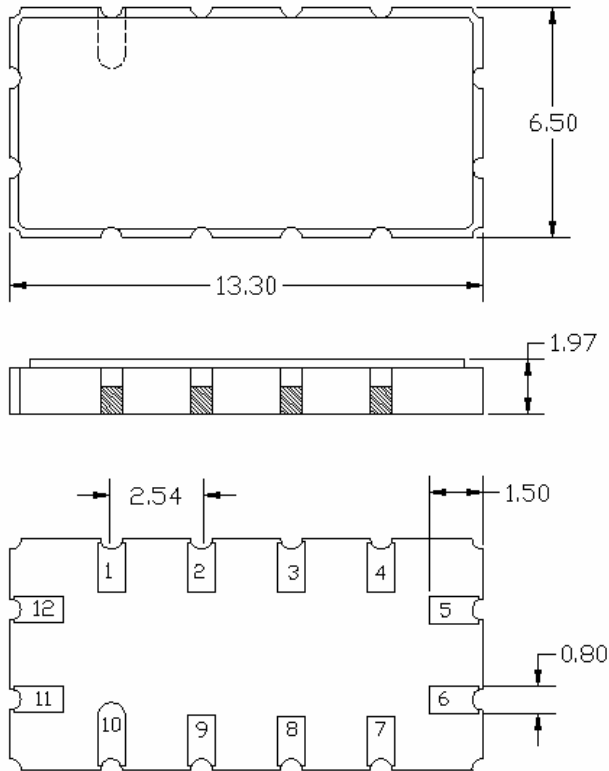


Typical component values: Ls1 = 120 nH Ls2 = 100 nH
(Minimum inductor Q = 40)

Notes:

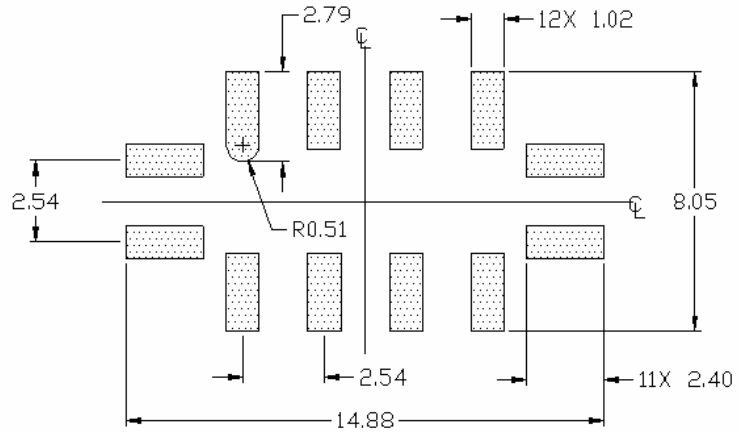
- Suggest the use of 2% tolerance matching components.
- Tuning values shown are for reference only. Optimum values may change depending upon board layout.

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: All other pads

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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