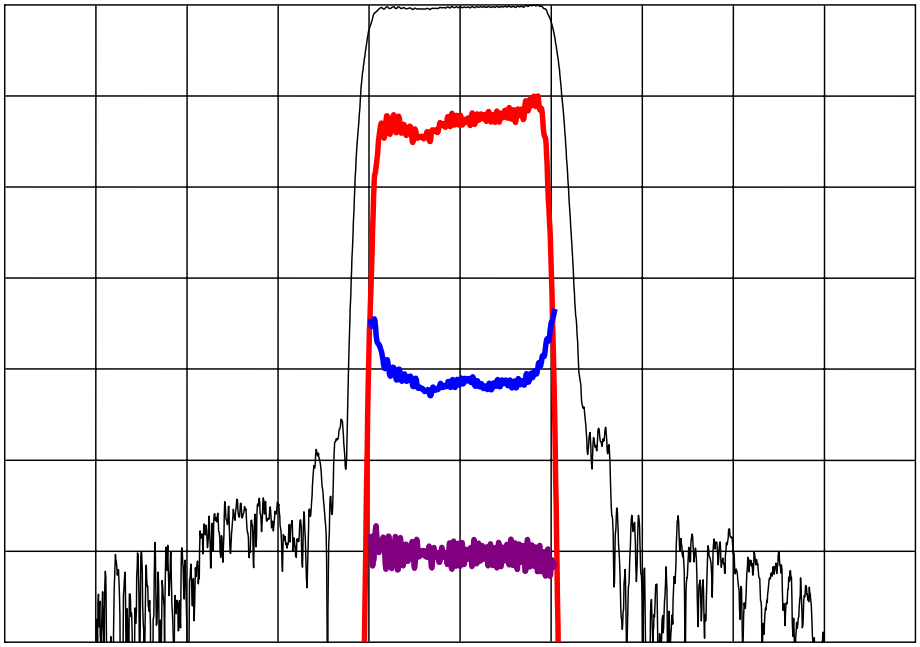
DESCRIPTION

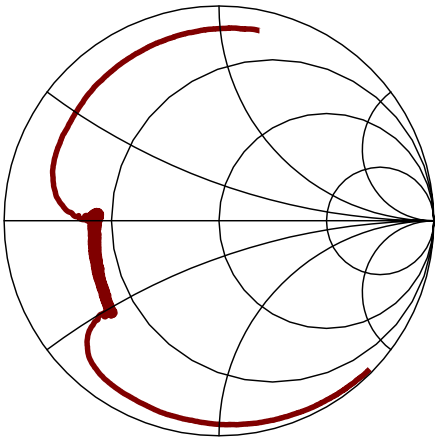
- 70 MHz SAW bandpass filter with 20 MHz bandwidth.
- 13.3 x 6.5 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE

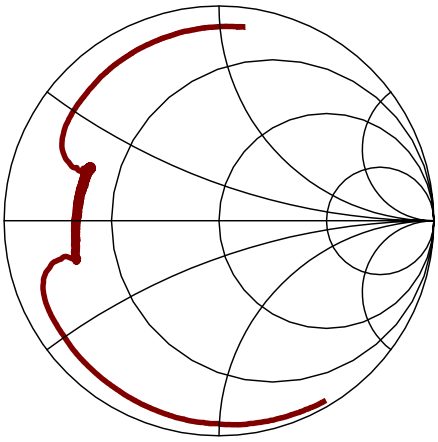


Horizontal:	Frequency :	10	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	10	deg/div
	Group Delay Deviation :	100	ns/div

S11



S22



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www.SpectrumMicrowave.com

SPECIFICATION

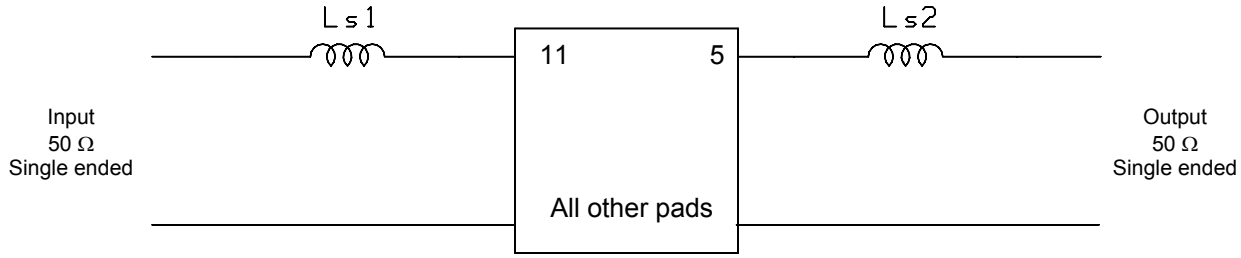
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) [1]	69.8	70	70.2	MHz
Insertion Loss	-	14.2	15.0	dB
1 dB Bandwidth	18.9	19.3	-	MHz
3 dB Bandwidth	20.0	20.4	-	MHz
40 dB Bandwidth	-	25.4	26.1	MHz
Passband Ripple	-	0.5	1.0	dB
Phase Deviation from Linear [2]	-	5	11.2	deg
Group Delay Variation [2]	-	55	90	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 $\Delta f = (T-T_{ref})*Tc*Fc$, 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

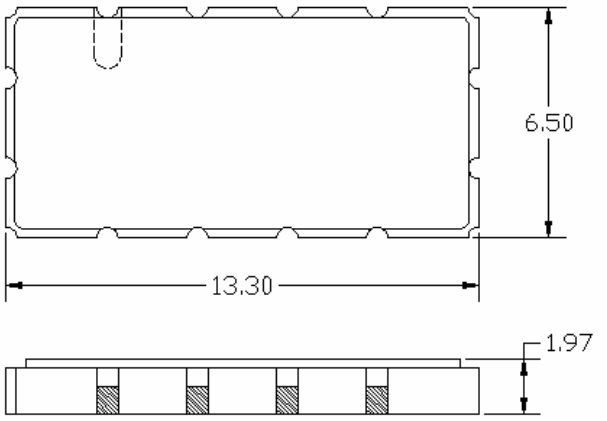
MATCHING CIRCUIT

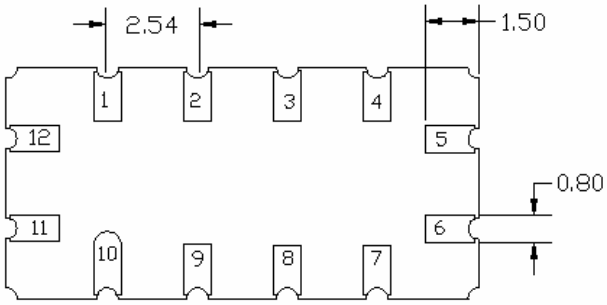


Typical component values: Ls1 = 120 nH Ls2 = 100 nH
(Minimum inductor Q = 40)

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

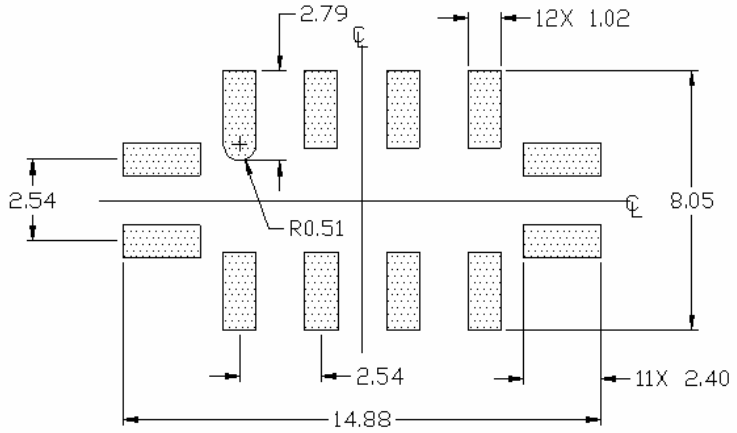
PACKAGE OUTLINE





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

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