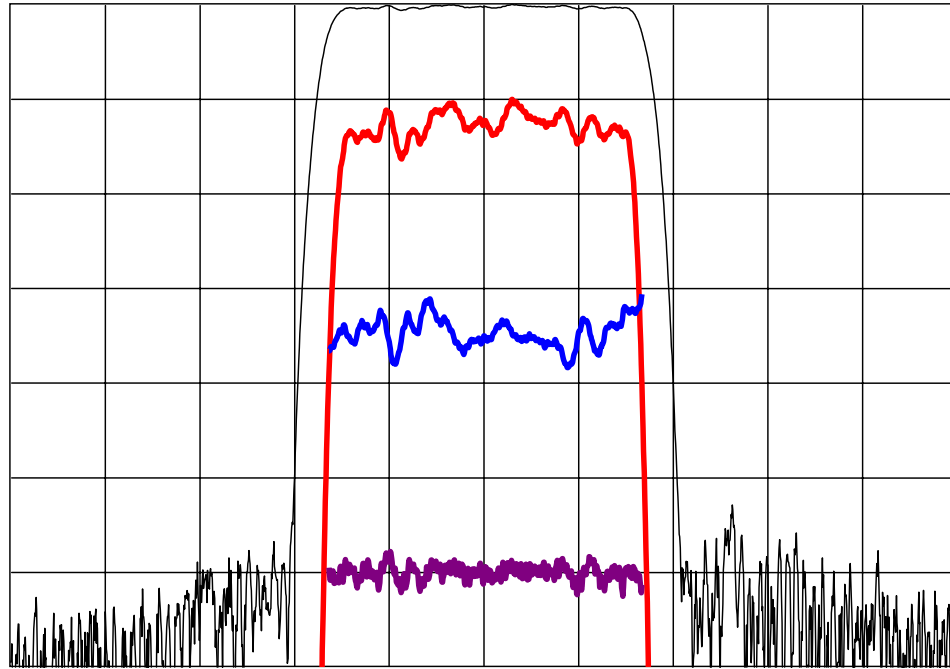


DESCRIPTION

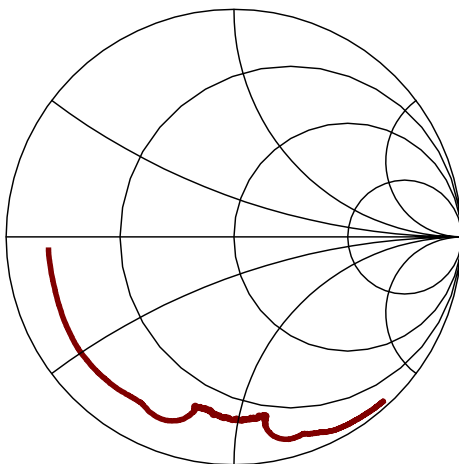
- 140 MHz SAW bandpass filter with 32 MHz bandwidth.
- 13.3 x 6.5 mm SMP.
- RoHS compliant.

TYPICAL PERFORMANCE

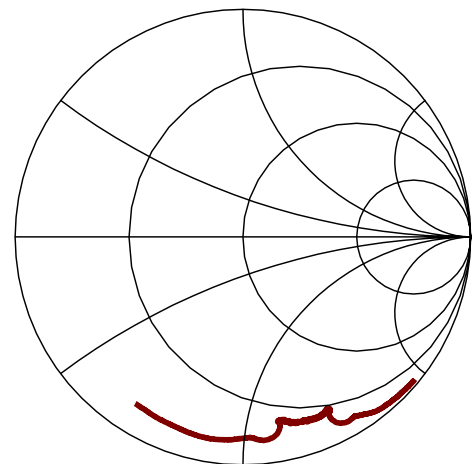


Horizontal:	Frequency :	10	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	5	deg/div
	Group Delay Deviation :	50	ns/div

S11



S22



SPECIFICATION

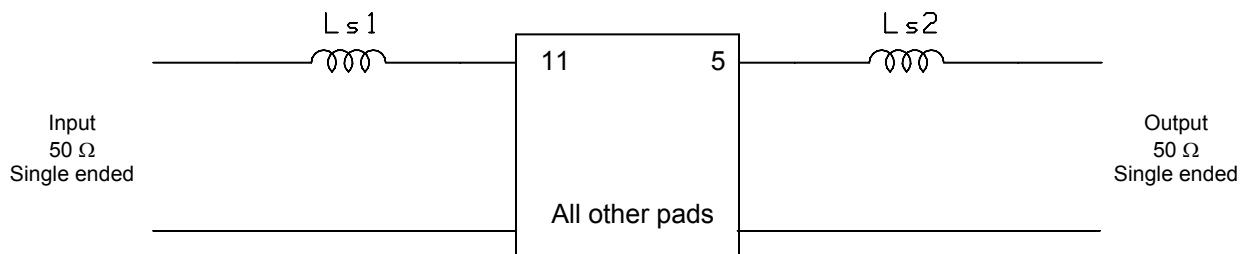
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	139.75	140.00	140.25	MHz
Insertion Loss	-	24.5	27.0	dB
1 dB Bandwidth	30	31.52	-	MHz
3 dB Bandwidth	32	33.15	-	MHz
40 dB Bandwidth	-	39.78	40	MHz
Passband Ripple ³	-	0.6	0.7	dB
Phase Deviation from Linear ²	-	3.5	6	deg
Group Delay Variation ²	-	25	40	ns
Absolute Delay	-	1.16	-	μs
Rejection (90 to 115 MHz)	50	57	-	dB
Rejection (165 to 190 MHz)	50	53	-	dB
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 Fc±15 MHz frequency range.
 3. Includes all amplitude variation except for roll offs at each side of passband.
 4. 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) ⁴	-	-74	-	ppm/°C
Input Power Level	-	0	10	dBm

MATCHING CIRCUIT

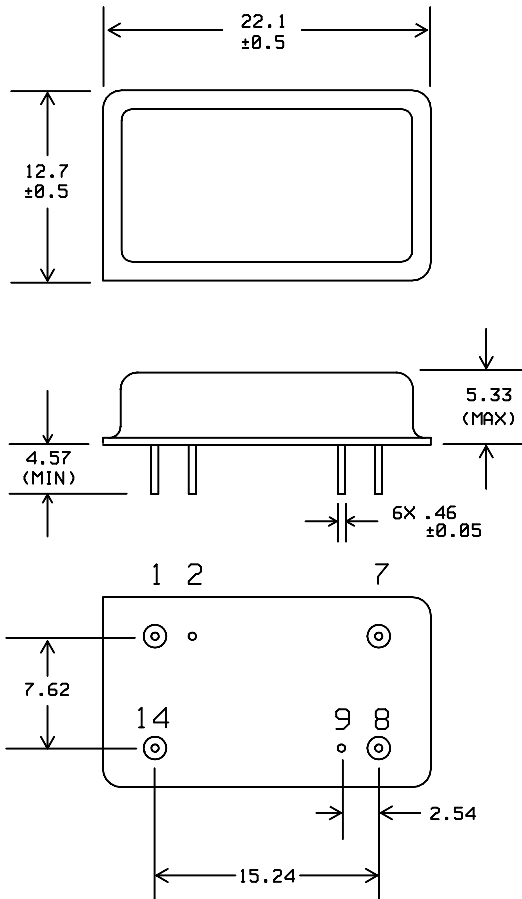


Typical component values: Ls1 = 160 nH Ls2 = 120 nH
(Minimum inductor Q = 40)

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



Units: mm

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

Pin Configuration:

Input:	14
Input return:	1
Output:	8
Output return:	7
Ground:	2,9

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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