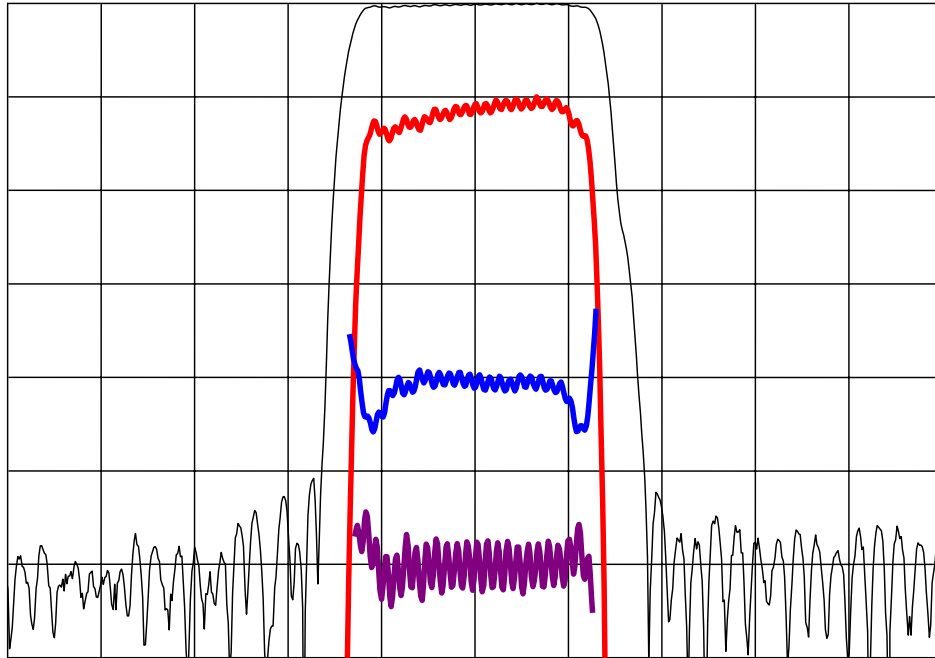


DESCRIPTION

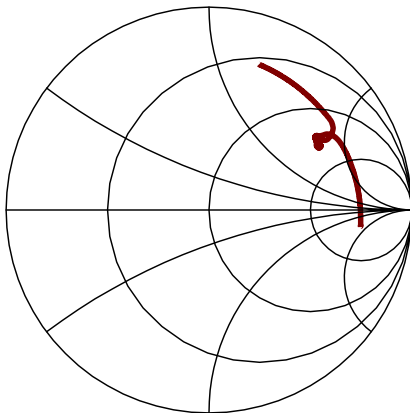
- 140 MHz SAW bandpass filter with 4.7 MHz bandwidth.
- 22 x 12.7 mm DIP package.
- RoHS compliant.

TYPICAL PERFORMANCE

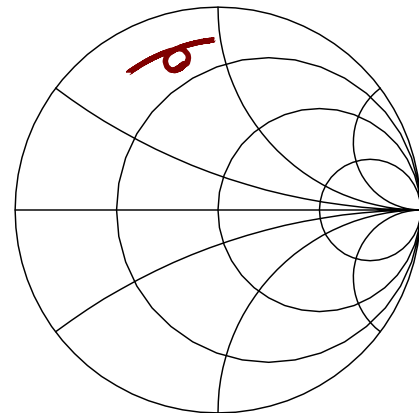


Horizontal:	Frequency :	2	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	5	deg/div
	Group Delay Deviation :	100	ns/div

S11 (130-150 MHz)



S22 (130-150 MHz)



SPECIFICATION

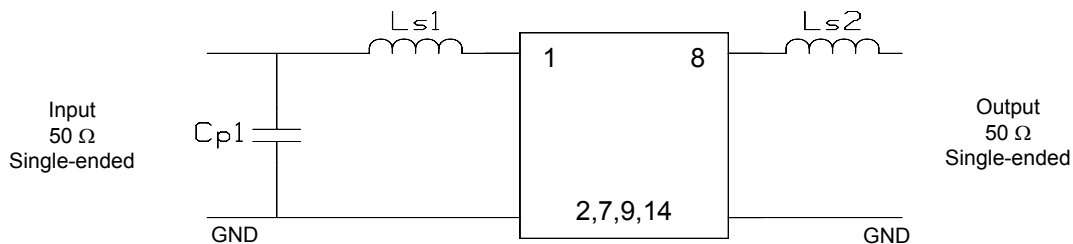
Parameter	Min	Typ	Max	Units
Center Frequency (F _c , 3 dB points)	139.90	140.00	140.10	MHz
Insertion Loss (at F _c)	-	22.5	25	dB
1 dB Bandwidth ²	4.70	4.96	-	MHz
3 dB Bandwidth ²	5.00	5.28	-	MHz
40 dB Bandwidth ²	-	6.67	7.00	MHz
Absolute delay	-	2.30	2.60	us
Group Delay Deviation (in 1 dB BW) ³	-	110	180	ns p-p
Phase Linearity (in 1 dB BW)	-	5	7	deg p-p
Passband Ripple (in 1 dB BW)	-	0.7	1	ns/div
Ultimate Rejection	50	53	-	dB
Source/Load Impedance	50			ohms
Ambient Temperature (T _{ref})	-	25	-	°C

- Notes:
1. All specifications apply at 23°C.
 2. Parameter is measured relative to the insertion loss at 140 MHz.
 3. This parameter is to be measured after application of a smoothing aperture of 250 KHz.
 4. Typical change of filter 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 (T _c) ⁴	-	-23	-	ppm/°C
Input Power Level	-	0	13	dBm

MATCHING CIRCUIT



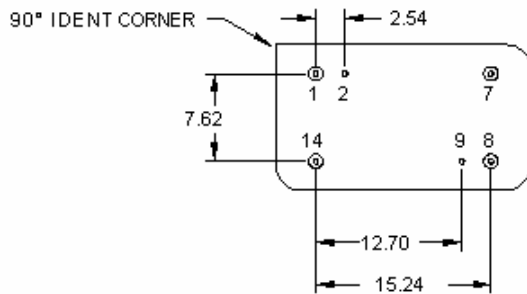
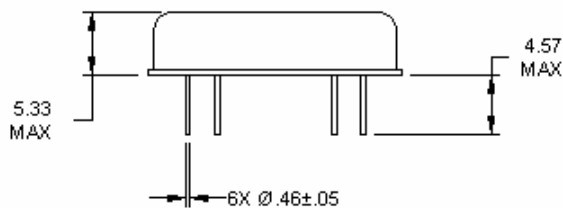
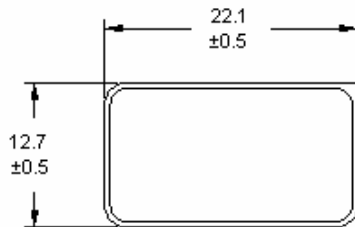
Typical component values:

$$\begin{aligned} L_{s1} &= 37 \text{ nH} & L_{s2} &= 56 \text{ nH} \\ C_{p1} &= 27 \text{ pF} & & \end{aligned}$$

Notes:

1. Recommend use of 2% tolerance matching components. Inductor Q=45.
2. Component values are for reference only and may change depending on 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:	1
Output:	8
Ground:	2,7,9,14

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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