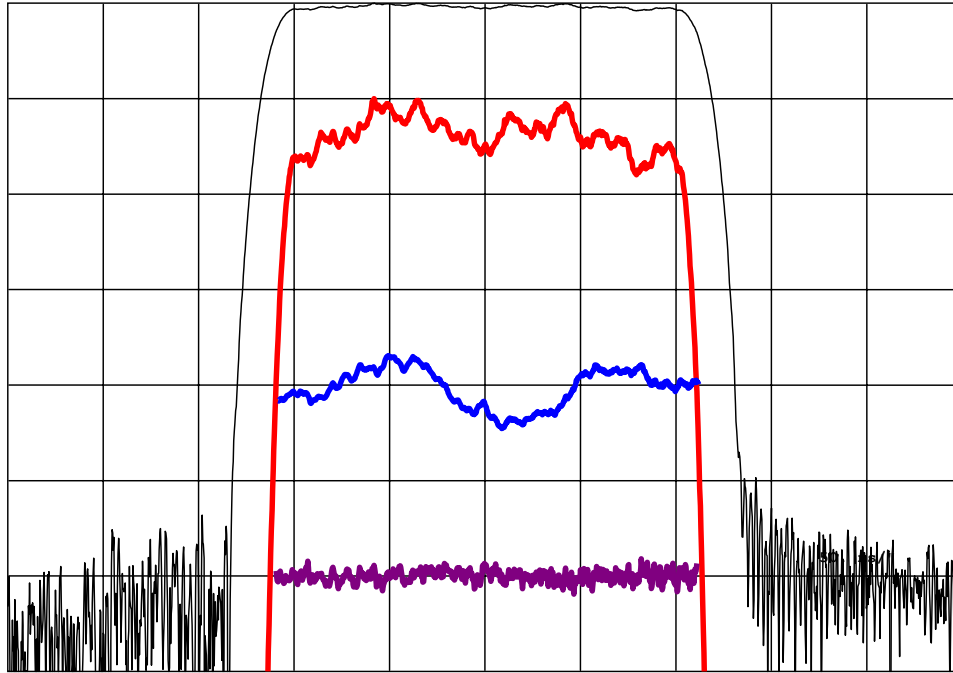


**DESCRIPTION**

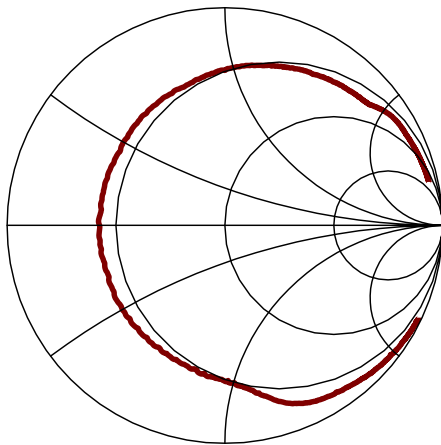
- 140 MHz SAW bandpass filter with 64 MHz bandwidth.
- 22 x 12 mm DIP package.
- RoHS compliant.

**TYPICAL PERFORMANCE**

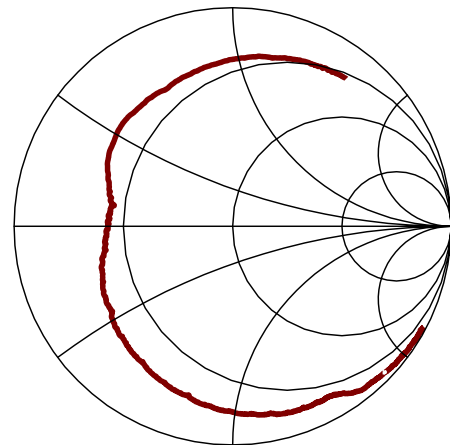


Horizontal: Frequency : 15 MHz/div  
 Vertical from Top: Relative Magnitude : 10 dB/div  
 Relative magnitude : 1 dB/div  
 Phase Linearity : 10 deg/div  
 Group Delay Deviation : 50 ns/div

**S11 (65 to 215 MHz)**



**S22 (65 to 215 MHz)**



## SPECIFICATION

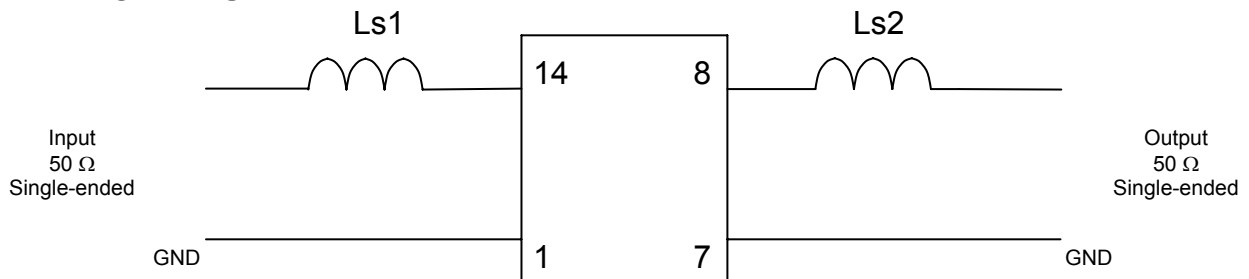
Parameter	Min	Typ	Max	Units
Center Frequency ( Fc ) <sup>1</sup>	139.75	140.0	140.25	MHz
Insertion Loss at Fc	-	28.5	31	dB
1 dB Bandwidth	60	62.8	-	MHz
3 dB Bandwidth	64	66.2	-	MHz
40 dB Bandwidth	-	78.5	81.0	MHz
Passband Ripple <sup>2</sup>	-	0.8	1	dB p-p
Phase Ripple <sup>2</sup>	-	5.3	10	deg p-p
Group Delay Ripple <sup>2</sup>	-	18	25	ns p-p
Absolute Delay	-	1.0	-	us
Rejection (65 to 95 MHz)	45	53	-	dB
Rejection (185 to 215 MHz)	45	52	-	dB
Source and Load Impedance	50			Ω
Ambient Temperature (Tref)	-	25	-	° C

- Notes:
1. Defined as the mean of the 3 dB band edge frequencies.
  2. Over the central 60 MHz 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) <sup>3</sup>	-	-74	-	ppm/°C
Input Power Level	-	0	13	dBm

## MATCHING CIRCUIT



Typical component values:  
Minimum Q=45

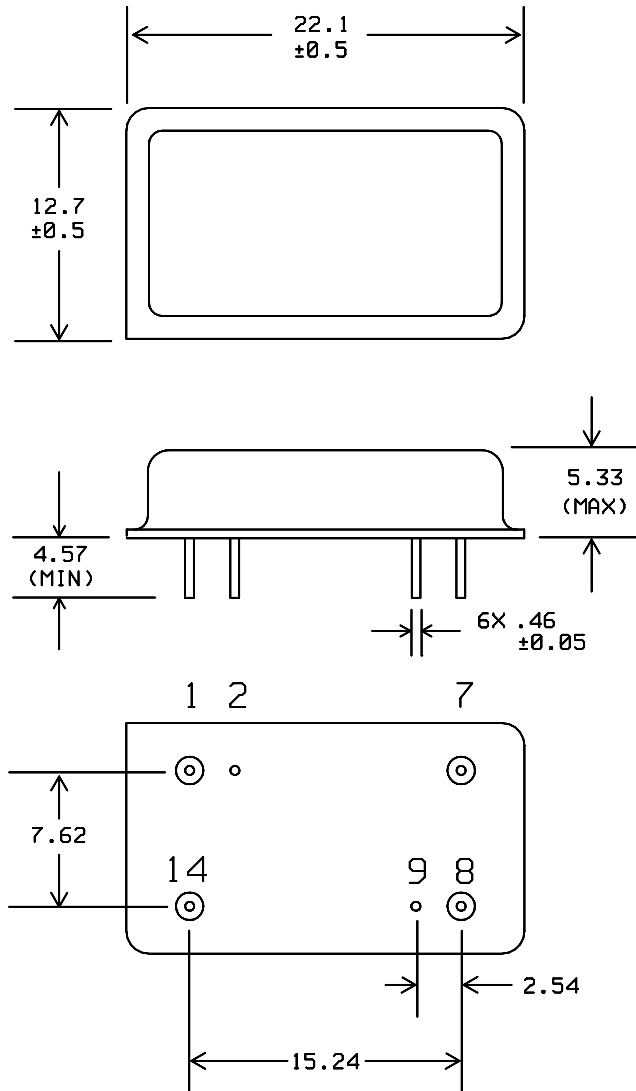
$$L_{s1} = 155 \text{ nH}$$

$$L_{s2} = 196 \text{ nH}$$

Notes:

1. Recommend use of 2% tolerance matching components.
2. Component values are for reference only and may change depending on board layout.

**PACKAGE OUTLINE**



**Units:** mm

Tolerances are  $\pm 0.15$  mm except where indicated and 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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