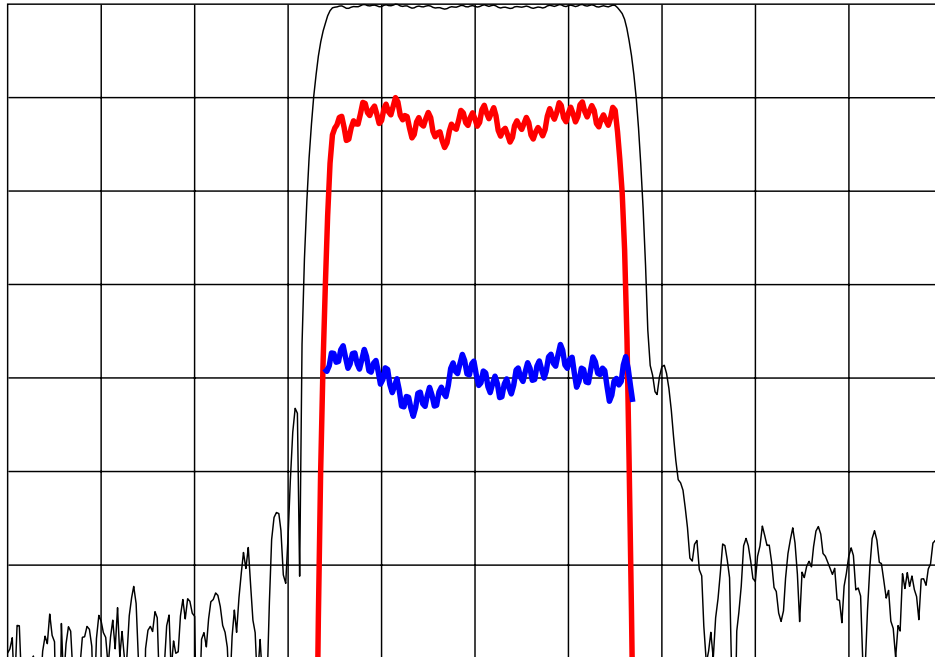


## DESCRIPTION

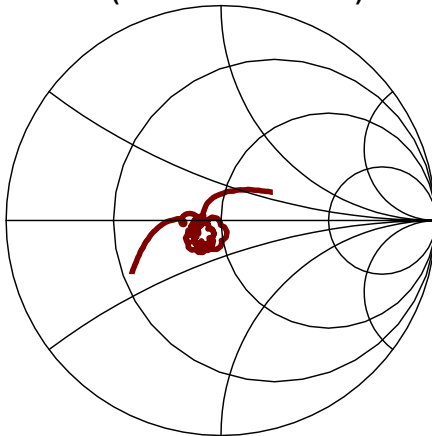
- 69.99 MHz SAW bandpass filter with 1.26 MHz bandwidth for CDMA applications.
- 73.28 x 19.94 mm DIP.
- RoHS compliant.

## TYPICAL PERFORMANCE

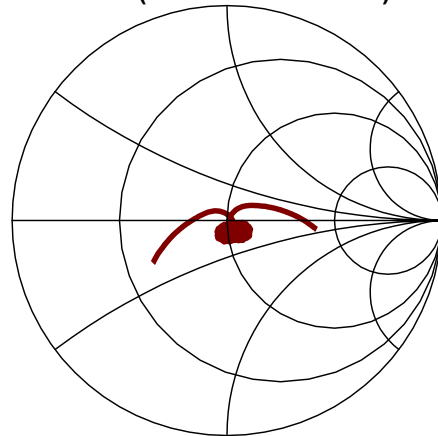


Horizontal: Frequency : 0.5 MHz/div  
 Vertical from top: Relative Magnitude : 10 dB/div  
 Relative magnitude : 1 dB/div  
 Phase Linearity : 5 deg/div  
 Group Delay Deviation : 100 ns/div

**S11 (67.49 to 72.49 MHz)**



**S22 (67.49 to 72.49 MHz)**



## SPECIFICATION

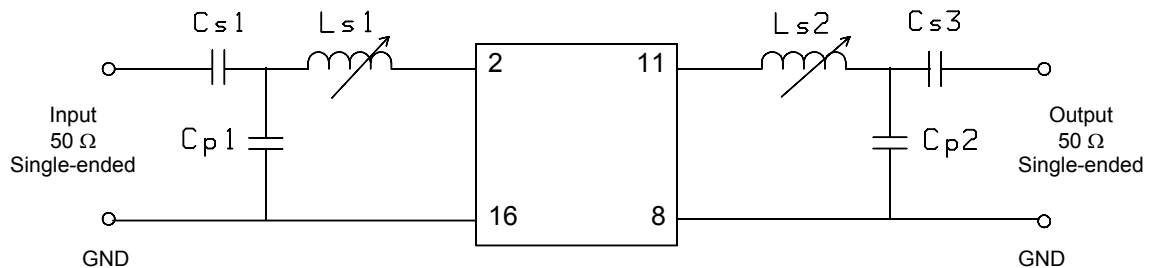
Parameter	Min	Typ	Max	Units
Center Frequency ( Fc ) <sup>1</sup>	-	69.99	-	MHz
Insertion Loss	-	20.2	22	dB
Lower 1.5 dB Frequency	-	69.34	69.36	MHz
Upper 1.5 dB Frequency	70.62	70.64	-	MHz
Lower 35 dB Band Edge	69.24	69.26	-	MHz
Upper 35 dB Band Edge	-	70.72	70.74	MHz
Rejection at Fc +/- 0.90 MHz <sup>3</sup>	50	55	-	dB
Triple Transit Suppression	30	40	-	dB
Passband Amplitude Ripple <sup>2</sup>	-	0.5	0.7	dB p-p
Passband Phase Linearity <sup>2</sup>	-	4	10	deg p-p
Rejection (10 to 152 MHz)	45	50	-	dB
Rejection (168 to 250 MHz)	45	50	-	dB
Ambient Temperature	-	25	-	°C
Source / Load Impedance	-	50	-	Ω

- Notes:
1. Average of the lower and upper 3 dB band edge frequencies.
  2. Defined over Fc +/- 0.615 MHz.
  3. Dependent on PC board layout.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-5	65	°C
Input Power Level		10	dBm

## MATCHING CIRCUIT



Typical component values:  
(Minimum inductor Q = 40)

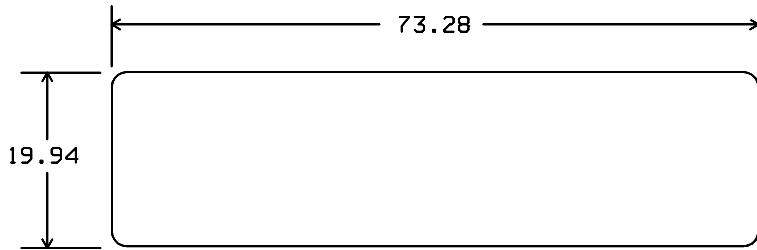
$$\begin{aligned} Ls1 &= 150 \text{ nH} \\ Cp1 &= 82 \text{ pF} \\ Cs1 &= 47 \text{ pF} \end{aligned}$$

$$\begin{aligned} Ls2 &= 150 \text{ nH} \\ Cp2 &= 68 \text{ pF} \\ Cs2 &= 47 \text{ pF} \end{aligned}$$

Notes:

1. Recommend use of +/- 2% tolerance capacitors. Inductors are +/- 6% and are adjustable.
2. Component values may change depending on board layout.

**PACKAGE OUTLINE**

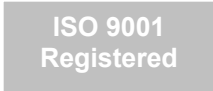
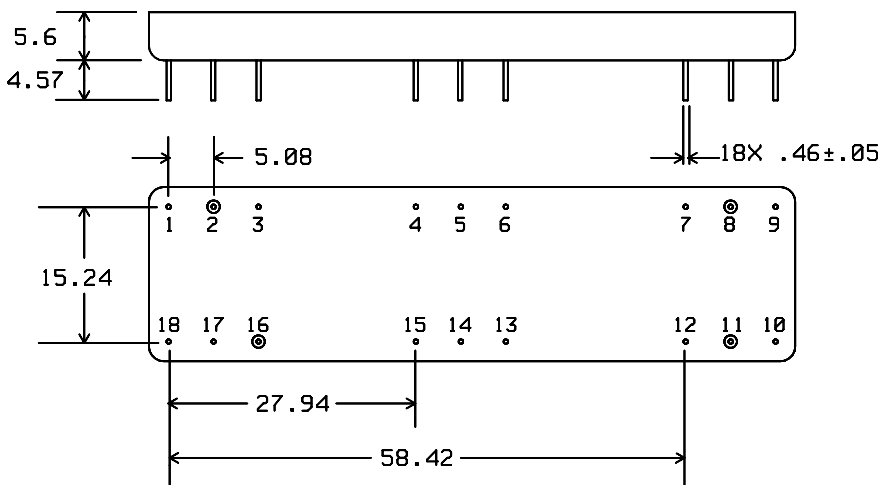


**Units:** mm

Tolerances are  $\pm 0.15$  mm except for the overall length, width and pad dimensions, which are nominal values.

**Pin Configuration:**

Input: 2  
 Output: 11  
 Output return: 8  
 Ground: all other pins



All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.  
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