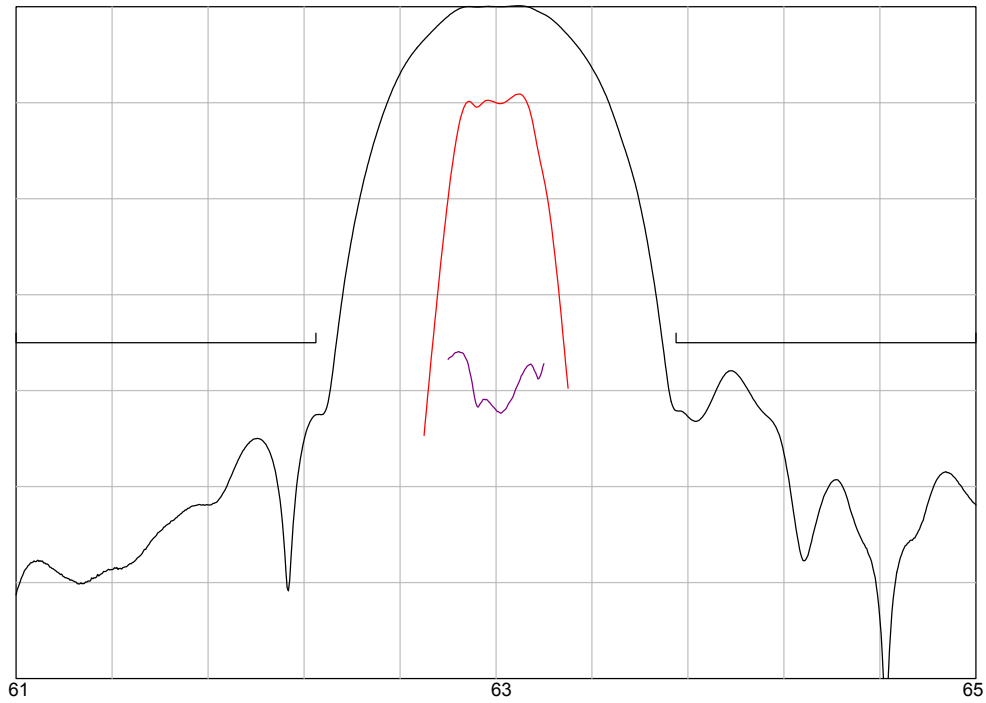


## DESCRIPTION

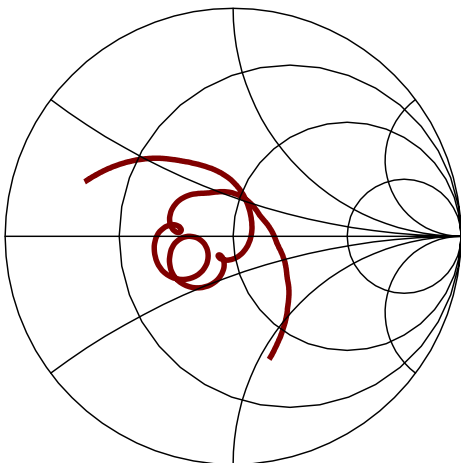
- 63 MHz SAW bandpass filter with 0.55 MHz bandwidth in 19 x 6.55 mm SMP.
- RoHS compliant.

## TYPICAL PERFORMANCE

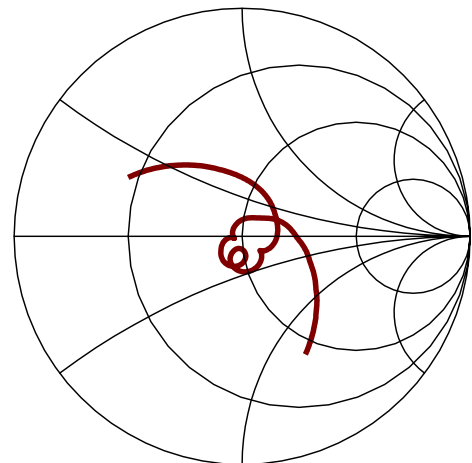


Vertical from top:      Relative Magnitude :    10    dB/div  
    Relative magnitude :    1    dB/div  
    Group Delay Deviation :    500    ns/div

**S11 (61-65 MHz)**



**S22 (61-65 MHz)**



## SPECIFICATION

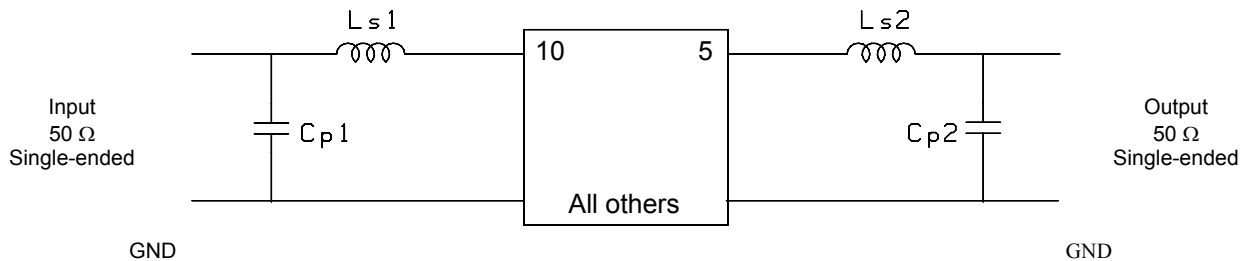
Parameter	Min	Typ	Max	Units
Center Frequency, $F_c$ <sup>1</sup>	62.95	63	63.05	MHz
Insertion Loss at 63 MHz	-	8.35	9	dB
1 dB Bandwidth <sup>2</sup>	0.35	0.41	-	MHz
3 dB Bandwidth <sup>2</sup>	0.55	0.58	-	MHz
35 dB Bandwidth <sup>2</sup>	-	1.35	1.4	MHz
Relative Attenuation (61 to 62.25 MHz)	35	42	-	dB
Relative Attenuation (63.75 to 65 MHz)	35	38	-	dB
Relative Attenuation (10 to 61 MHz)	43	55	-	dB
Relative Attenuation (65 to 140 MHz)	43	49	-	dB
Passband Ripple	-	0.2	1.0	dB p-p
Group Delay Ripple ( $F_c \pm 0.2$ MHz)	-	300	520	ns p-p
Absolute Delay	-	1.95	-	us
Source/Load Impedance	50			ohms

Notes: 1. Defined as the average of the lower and upper 3 dB frequencies.  
2. All dB levels are defined relative to the insertion loss at 63 MHz.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-40	8	°C
Input Power Level		10	dBm

## MATCHING CIRCUIT



Typical component values:  
(Minimum inductor Q = 40)

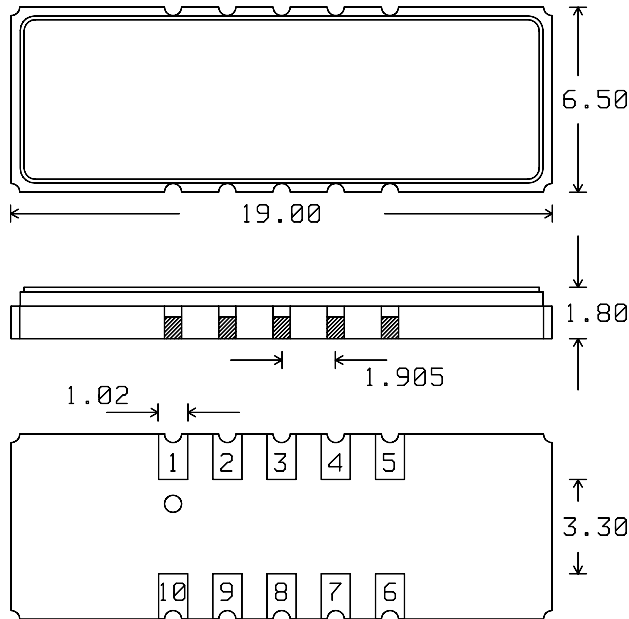
$$\begin{aligned} L_{s1} &= 540 \text{ nH} \\ C_{p1} &= 100 \text{ pF} \end{aligned}$$

$$\begin{aligned} L_{s2} &= 616 \text{ nH} \\ C_{p2} &= 82 \text{ pF} \end{aligned}$$

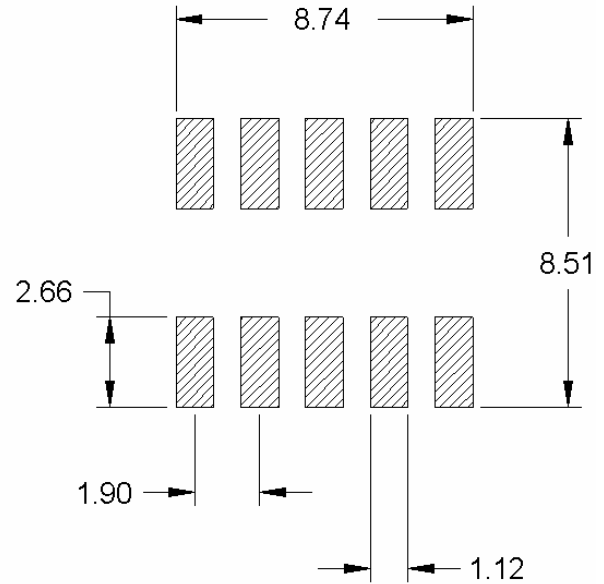
Notes:

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

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



**Units:** mm

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

**Pad Configuration:**

Input:	10
Input return:	1
Output:	5
Output return:	6
Ground:	2,3,4,7,8,9

Package Material:  
Body:  $Al_2O_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 1  $\mu$ m min,  
over a 1.3-8.9  $\mu$ m Ni plating

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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