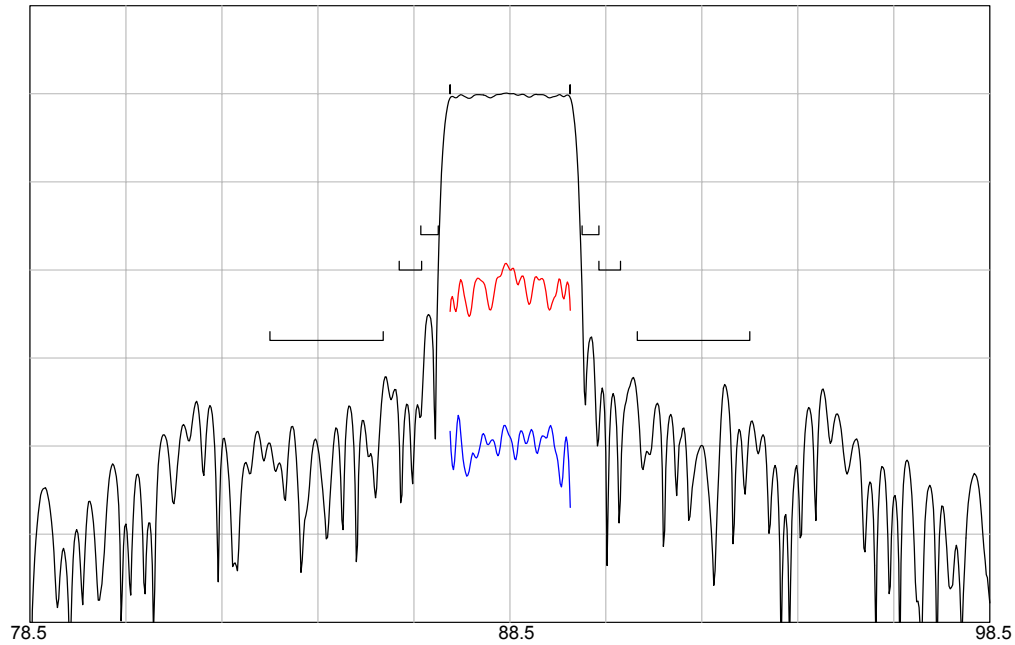


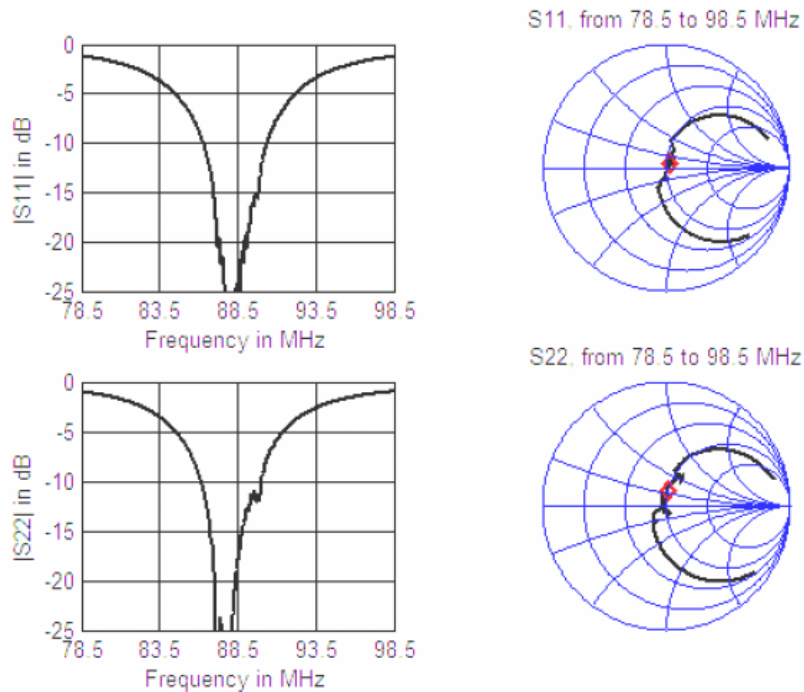
**DESCRIPTION**

- 88.5 MHz SAW bandpass filter with 2.5 MHz bandwidth in 15.9 x 6.5 mm SMP.
- 6/6 RoHS compliant.

**TYPICAL PERFORMANCE**



Vertical from top: Relative Magnitude : 10 dB/div  
 Relative magnitude : 1 dB/div  
 Phase Linearity : 5 deg/div



## SPECIFICATION

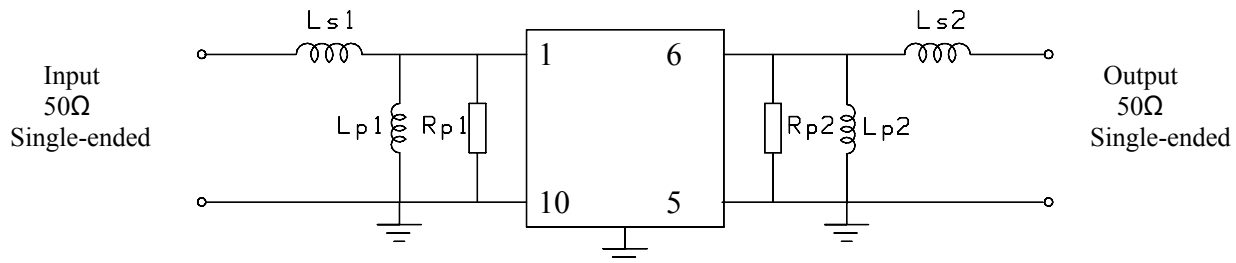
Parameter	Min	Typ	Max	Units
Center Frequency (Fc, 10 dB bandwidth)	-	88.50	-	MHz
Insertion Loss at Fc	-	22	24	dB
Passband Width at -1 dB <sup>1</sup>	2.49	2.57	-	MHz
Rejection at Fc +/- 1.245 MHz <sup>1</sup>	-	0.5	1	dB
Rejection at Fc +/- 1.505 MHz <sup>1</sup>	16	20	-	dB
Rejection at Fc +/- 1.855 MHz <sup>1</sup>	20	33	-	dB
Rejection at Fc +/- 2.305 MHz <sup>1</sup>	22	33	-	dB
Rejection at Fc +/- 2.655 MHz <sup>1</sup>	28	33	-	dB
Rejection at Fc +/- 16.00 MHz <sup>1</sup>	50	53	-	dB
Ultimate Rejection (Fc-30 to Fc-16 MHz) <sup>1</sup>	50	54	-	dB
Ultimate Rejection (Fc+16 to Fc+30 MHz) <sup>1</sup>	47	50	-	dB
Amplitude Ripple (Fc +/- 1.0 MHz)	-	0.65	1.20	dB
Phase Linearity (Fc +/- 1.245 MHz)	-	4	10	deg p-p
Input Return Loss at Fc	14	20	-	dB
Output Return Loss at Fc	14	20	-	dB
System Source and Load Impedance	-	50	-	Ohm

Notes: 1. Stated dB level is relative to the insertion loss at Fc.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	+85	°C
Operating Temperature Range	-40	+85	°C
Input Power Level	-	+17	dBm
DC Voltage Between Each Terminal	-	15	V

## MATCHING CIRCUIT



Component values (minimum inductor Q = 40):

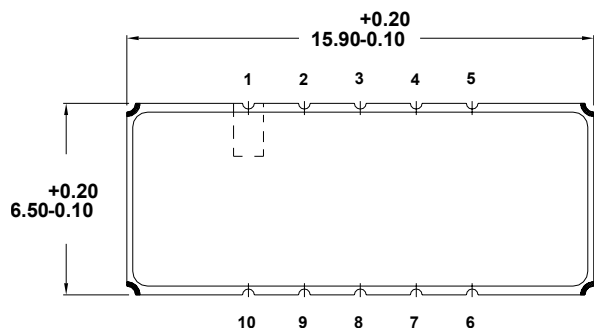
$$Rp1=5.6 \text{ K}\Omega, \quad Lp1=470 \text{ nH}, \quad Ls1=560 \text{ nH}$$

$$Rp2=10 \text{ K}\Omega, \quad Lp2=470 \text{ nH}, \quad Ls2=599 \text{ nH}$$

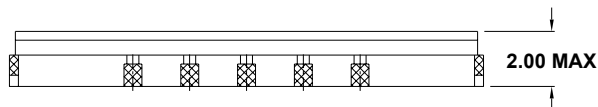
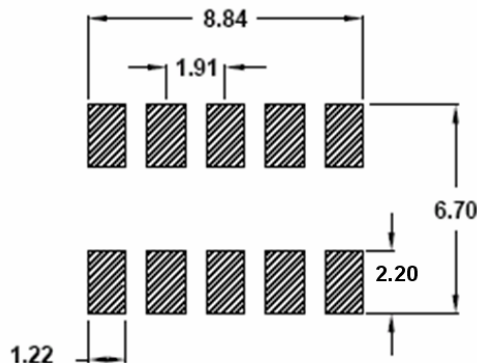
Notes:

1. Component values shown above are used in the Micro Networks test fixture and are for guidance only.
2. 2% tolerance components or better are recommended.
3. Component values may change depending on board layout.

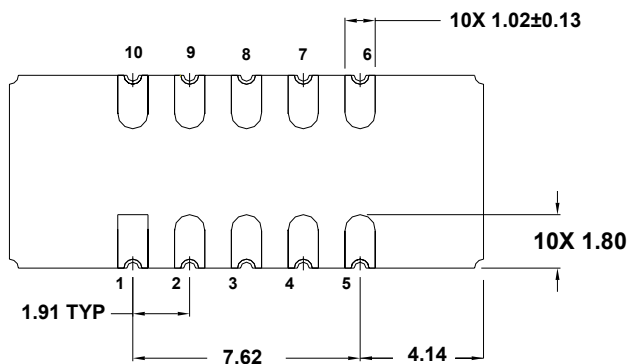
**PACKAGE OUTLINE AND RECOMMENDED PCB LAYOUT**



**TOP VIEW**



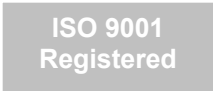
Pad Configuration:	
1	Input
10	Input Return
6	Output
5	Output Return
All Others	Ground



**BOTTOM VIEW**

NOTES:  
DIMENSIONS SHOWN ARE ALL NOMINAL IN MILLIMETRES. ALL TOLERANCES ARE  $\pm 0.15$ MM EXCEPT OVERALL LENGTH AND WIDTH

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



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