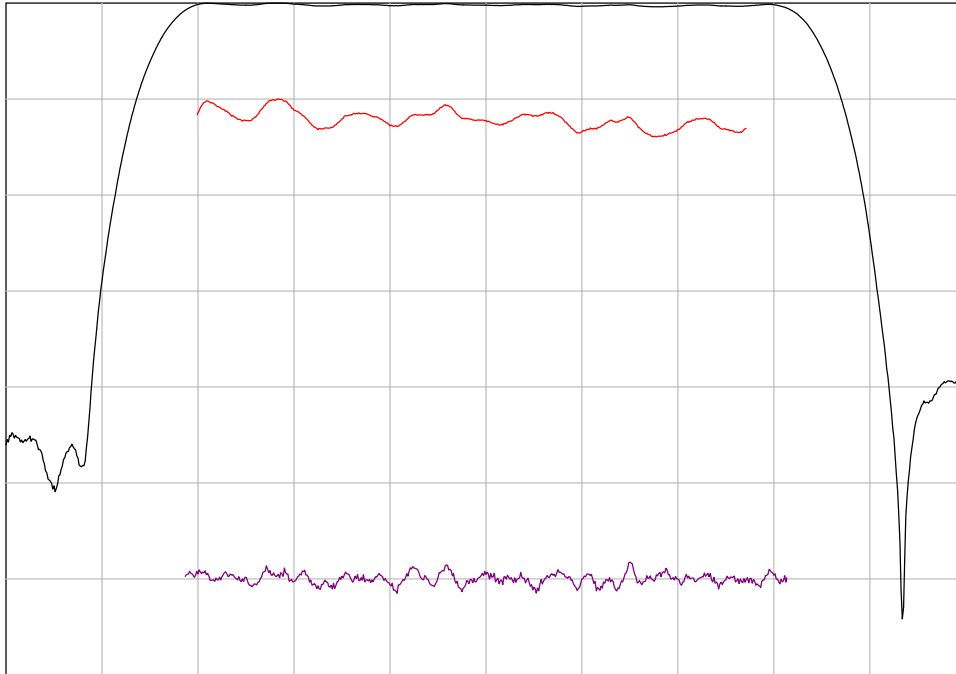


## DESCRIPTION

- 44 MHz SAW bandpass filter with 8 MHz bandwidth for Broadband Access.
- 24.6 x 9 mm SMP.
- RoHS compliant.

## TYPICAL PERFORMANCE



Horizontal: Frequency : 1.2 MHz/div  
Vertical from top: Relative Magnitude : 10 dB/div  
Relative magnitude : 1 dB/div  
Group Delay Deviation : 100 ns/div

## SPECIFICATION

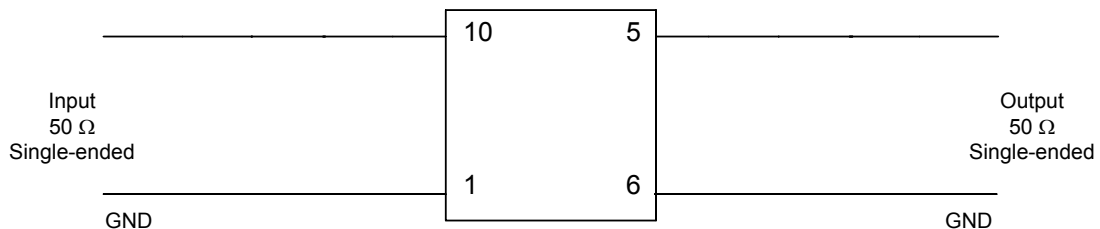
Parameter	Min	Typ	Max	Units
Center Frequency ( Fc ) <sup>1</sup>	-	44.0	-	MHz
Insertion Loss <sup>2</sup>	-	25	25.5	dB
Lower 1dB Band Edge	-	40.18	40.24	MHz
Upper 1 dB band Edge	47.76	47.84	-	MHz
3 dB Bandwidth	8.08	8.09	-	MHz
Lower 38 dB Band Edge	38.94	39.07	-	MHz
Upper 38 dB Band Edge	-	48.99	49.06	MHz
Passband Amplitude Ripple <sup>3</sup>	-	0.4	0.5	dB p-p
Passband Group Delay Ripple <sup>4</sup>	-	40	75	ns p-p
Rejection (10 to 36.84 MHz)	46	45	-	dB
Rejection (36.84 to 38.94 MHz)	39	42	-	dB
Rejection (49.06 to 51.16 MHz)	39	42	-	dB
Rejection (51.16 to 80 MHz)	41	45	-	dB
Ambient Temperature	-	25	-	°C
Source / Load Impedance	-	50	-	Ω
Temperature Coefficient of Frequency	-	-72	-	ppm/ °C
Substrate Material	128 Lithium Niobate			

- Notes:
1. Defined as the average of the lower and upper 3 dB frequencies.
  2. Value at 44 MHz.
  3. Measured over 40.39 to 47.25 MHz.
  4. Measured over 40.24 to 47.76 MHz.

## MAXIMUM RATINGS

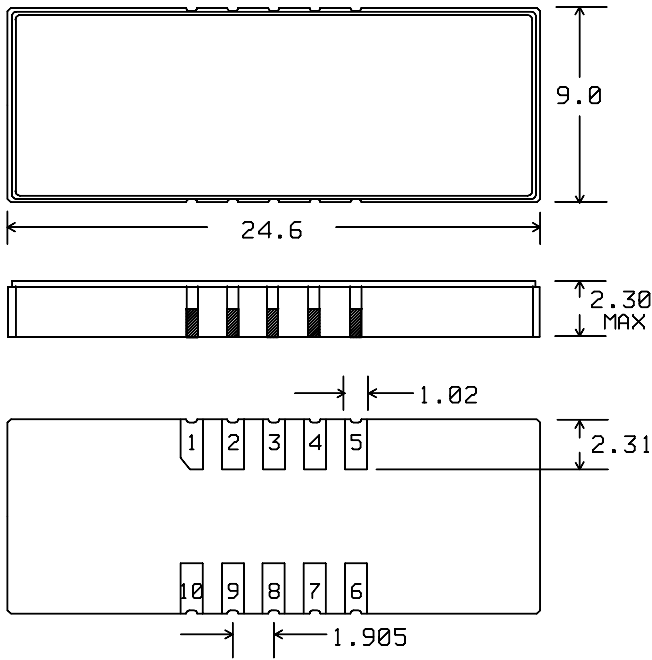
Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	20	30	°C
Input Power Level		10	dBm

## MATCHING CIRCUIT



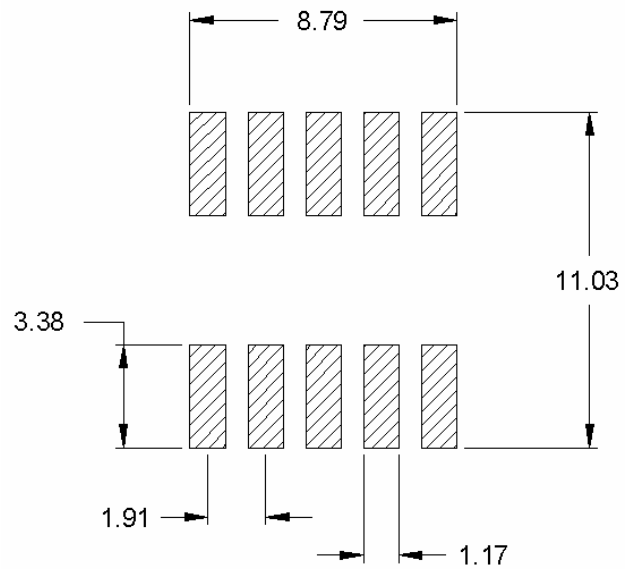
Note: External matching components are not required.

**PACKAGE OUTLINE**



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

**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

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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