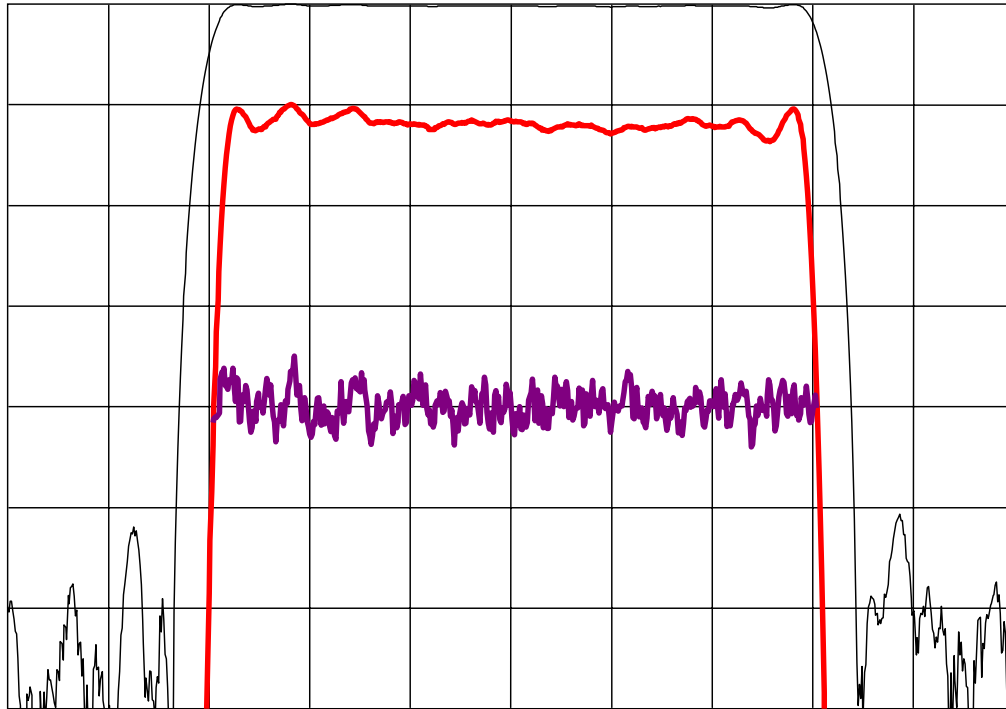


## DESCRIPTION

- 36 MHz SAW bandpass filter for VSB system B/G – IF applications.
- 35.1 x 20.6 mm DIP package.
- RoHS compliant.

## TYPICAL PERFORMANCE



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

## SPECIFICATION

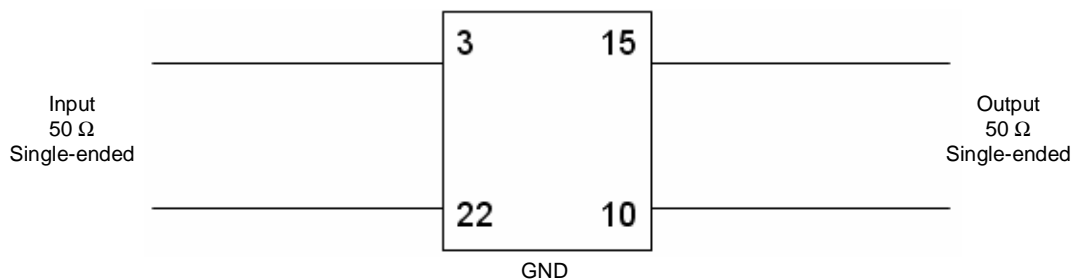
Parameter	Min	Typ	Max	Units
F_visual	-	38.9	-	MHz
F_color	-	34.5	-	MHz
F_audio	-	33.4	-	MHz
Center Frequency (Fc, nominal) <sup>1</sup>	-	36	-	MHz
Insertion Loss	-	27.5	29	dB
1 dB Lower Band Edge	-	33.75	33.9	MHz
1 dB Upper Band Edge	39.65	39.75	-	MHz
Passband Ripple (34.0 to 39.4 MHz)	-	0.3	0.5	dB p-p
Phase Deviation (33.9 to 39.65 MHz)	-	3	5	deg p-p
Group Delay Ripple (33.9 to 39.65 MHz)	-	40	50	ns p-p
Rejection (20 to 32 MHz)	50	55	-	dB
Rejection at 33.4 MHz	40	45	-	dB
Rejection at 40.15 MHz	40	45	-	dB
Rejection (40.4 to 55 MHz)	50	55	-	dB
2T K Factor	-	0.5	-	%
Pulse to Bar Ratio	-	1.5	-	%
Absolute Delay	-	4.5	-	us
Ambient Temperature (Tref)	37	40	43	° C
Source/Load Impedance	-	50	-	Ω
Substrate Material	Pyro-free 128° Lithium Niobate			

Notes: 1. Average of lower & upper 3 dB frequencies.  
2. Typical change of filter frequency response with temperature is  $\Delta f = (T - T_{ref}) * T_c * F_c$ , in ppm.

## MAXIMUM RATINGS

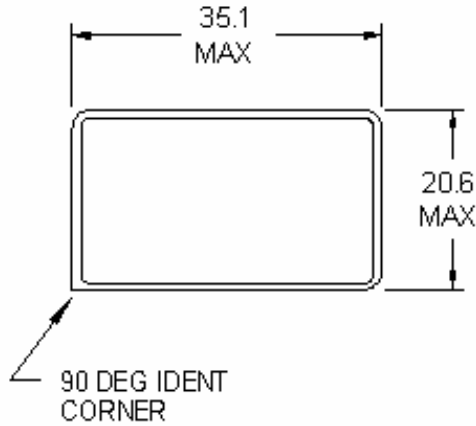
Parameter	Min	Typ	Max	Units
Storage Temperature Range	-40	40	85	°C
Temperature Coefficient of Frequency (Tc) <sup>2</sup>	-	-80	-	ppm/°C
Input Power Level	-	0	10	dBm

## MATCHING CIRCUIT



Note: External matching components are not required.

**PACKAGE OUTLINE**

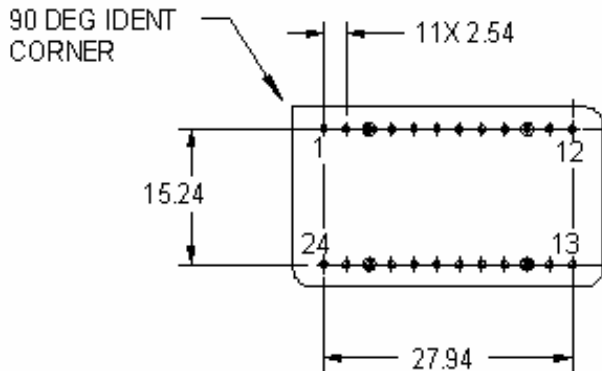
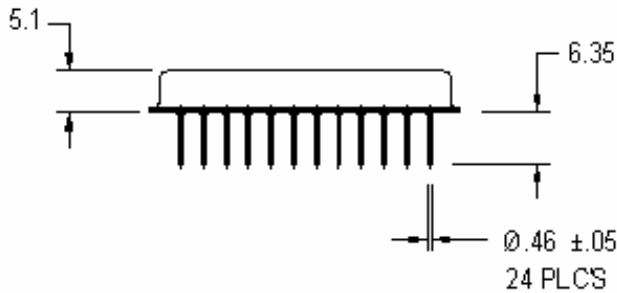


**Units:** mm

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

**Pin Configuration:**

Input:	3
Input return:	22
Output:	15
Output return:	10
Ground:	All other pins



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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