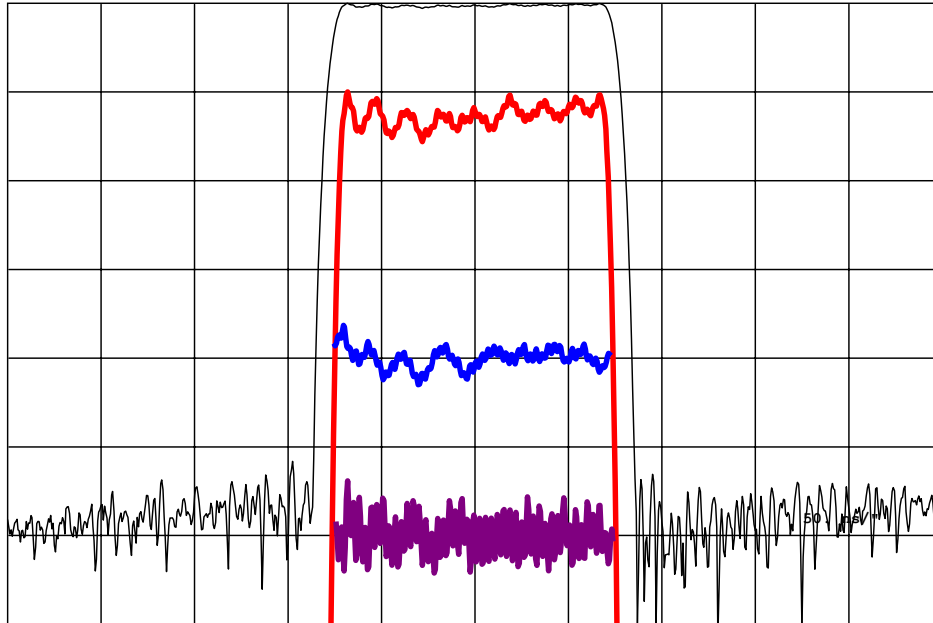


DESCRIPTION

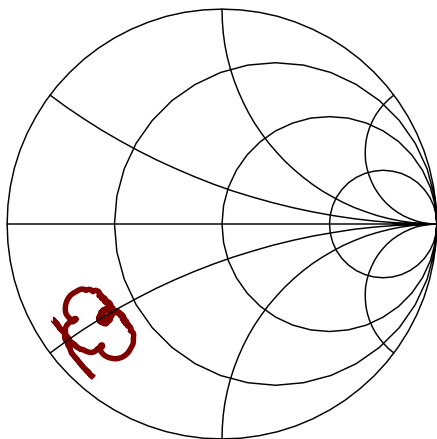
- 140 MHz SAW bandpass filter with 10 MHz bandwidth.
- 24.6 x 9 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

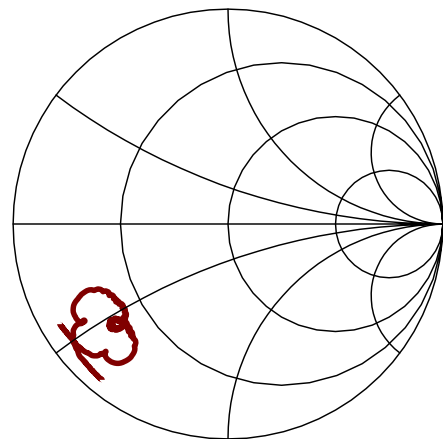


Horizontal:	Frequency	4	MHz /div
Vertical (from top):	Magnitude	10	dB/div
	Magnitude	1	dB/div
	Phase Deviation	5	deg/div
	Group Delay Deviation	50	ns/div

S11 (120-160 MHz)



S22 (120-160 MHz)



SPECIFICATION

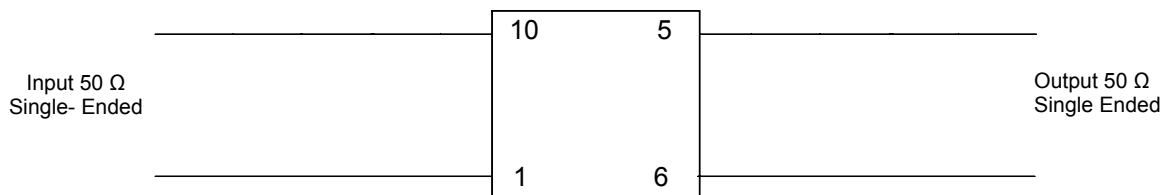
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	139.8	140	140.2	MHz
Insertion Loss	-	22.4	25	dB
1 dB Bandwidth	9.6	11.5	-	MHz
3 dB Bandwidth	10.5	11.9	-	MHz
35 dB Bandwidth	-	13.4	15	MHz
Passband Ripple ²	-	0.5	1	dB
Phase Deviation from Linear ²	-	3	6	deg
Group Delay Variation ²	-	45	100	ns
Absolute Delay	-	1.94	-	us
Ultimate Rejection (0.5*Fc to 1.5*Fc)	50	54	-	dB
Substrate Material	YZ Lithium Niobate			
Temperature Coefficient of Frequency (Tc) ³	-	-94	-	ppm/°C
Ambient Temperature (Tref)	-	25	-	°C
Source and Load Impedance	-	50	-	Ω

- Notes: 1. Average of lower & upper 3 dB frequencies.
2. Evaluated over 80% of the 3 dB bandwidth.
3. Typical change of filter frequency response with temperature is $\Delta f = (T - T_{ref}) * Tc * Fc$ in ppm or Hz.

MAXIMUM RATINGS

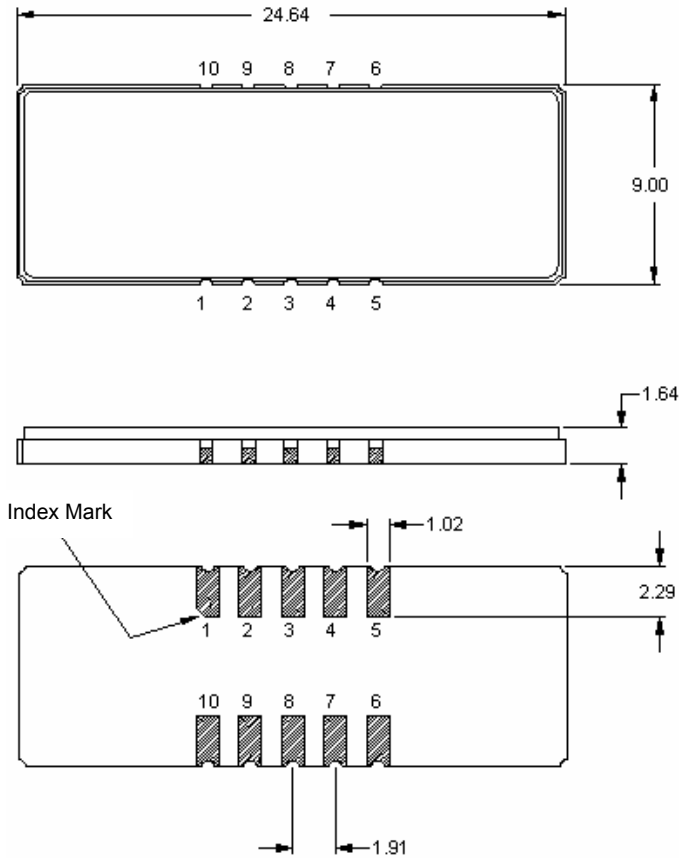
Parameter	Min	Max	Units
Storage Temperature Range	-40	+85	°C
Operating Temperature Range	-10	+60	°C
Input Power Level	-	+15	dBm
DC Voltage Between Each Terminal	-	15	V

MATCHING CIRCUIT



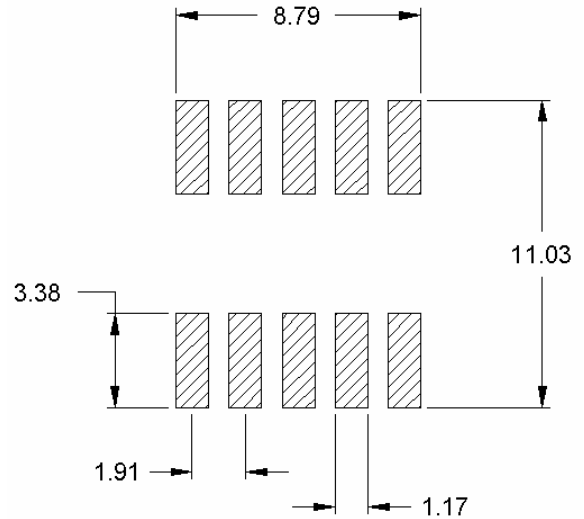
Note: Matching components are not required.

PACKAGE OUTLINE



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

SUGGESTED FOOTPRINT



Units: mm

Tolerances are typically ± 0.15 mm
except where indicated.

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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