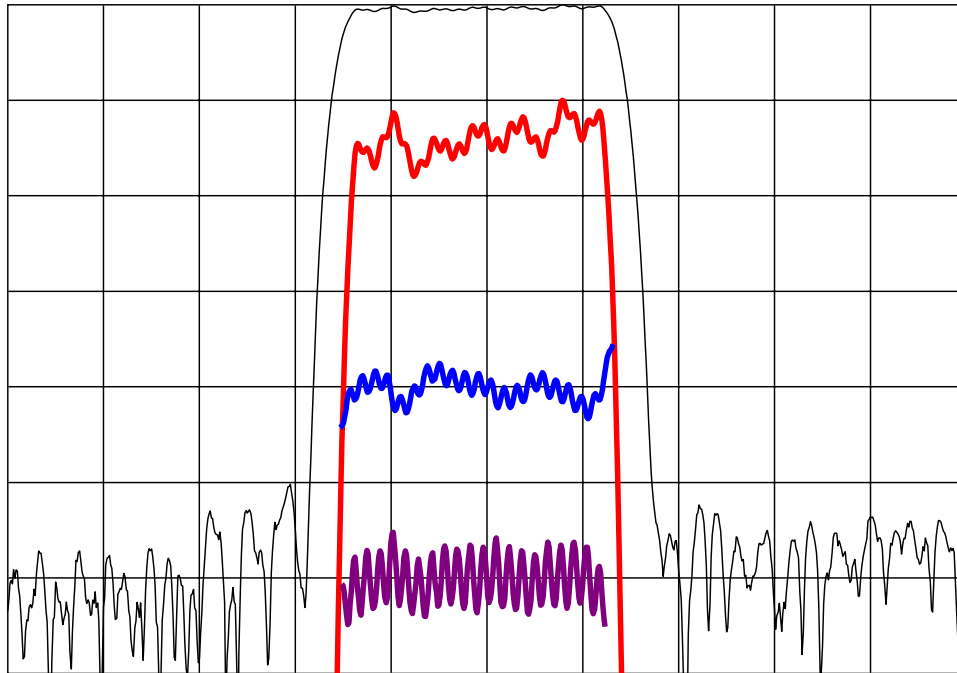


DESCRIPTION

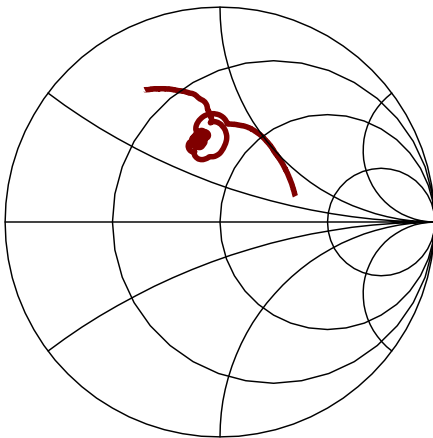
- 140 MHz SAW bandpass filter with 5 MHz bandwidth.
- 24.6 x 9 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

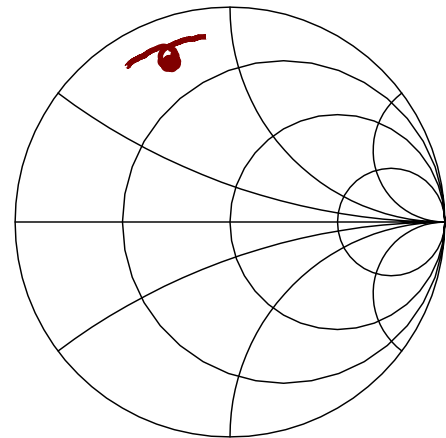


Horizontal:	Frequency	2	MHz /div
Vertical (from top):	Magnitude	10	dB/div
	Magnitude	1	dB/div
	Phase Deviation	5	deg/div
	Group Delay Deviation	100	ns/div

S11 (130-150 MHz)



S22 (130-150 MHz)



SPECIFICATION

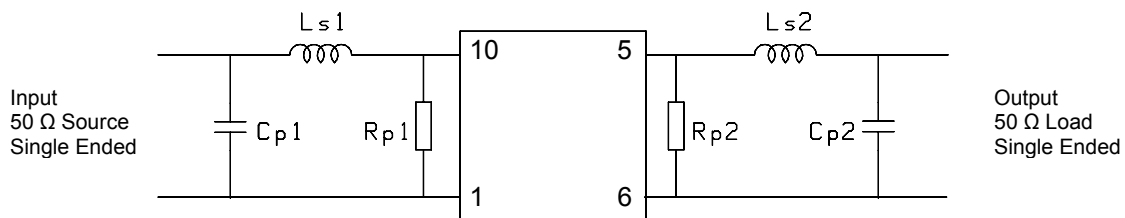
Parameter	Min	Typ	Max	Units
Center Frequency (Fc) ¹	-	140.00	-	MHz
Insertion Loss ²	-	20.5	25	dB
Lower 1dB Band Edge	-	137.29	137.55	MHz
Upper 1dB Band Edge	142.45	142.71	-	MHz
Lower 3dB Band Edge	-	136.98	137.35	MHz
Upper 3dB Band Edge	142.65	143.12	-	MHz
Lower 30dB Band Edge	136.00	136.54	-	MHz
Upper 30dB Band Edge	-	143.49	144.00	MHz
Passband Ripple ³	-	0.8	1.0	dB p-p
Phase Ripple ³	-	2.5	5	deg p-p
Absolute Delay	-	1.84	2.3	us
Group Delay Variation ^{3,4}	-	85	100	ns p-p
Rejection (70 to 125 MHz) ²	55	60	-	dB
(125 to 135.5 MHz) ²	48	53	-	dB
(144.5 to 155 MHz) ²	48	53	-	dB
(155 to 210 MHz) ²	50	53	-	dB
Temperature Coefficient of Frequency	-23			ppm/°C
Ambient Temperature	25			°C
System Source and Load Impedance	50			Ω

- 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.
 3. Defined over 137.88 to 142.12 MHz.
 4. A smoothing aperture of 0.1 MHz (0.5% of span) may be used for this measurement.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	+85	°C
Input Power Level	-	+13	dBm
DC Voltage Between Each Terminal	-	15	V

MATCHING CIRCUIT



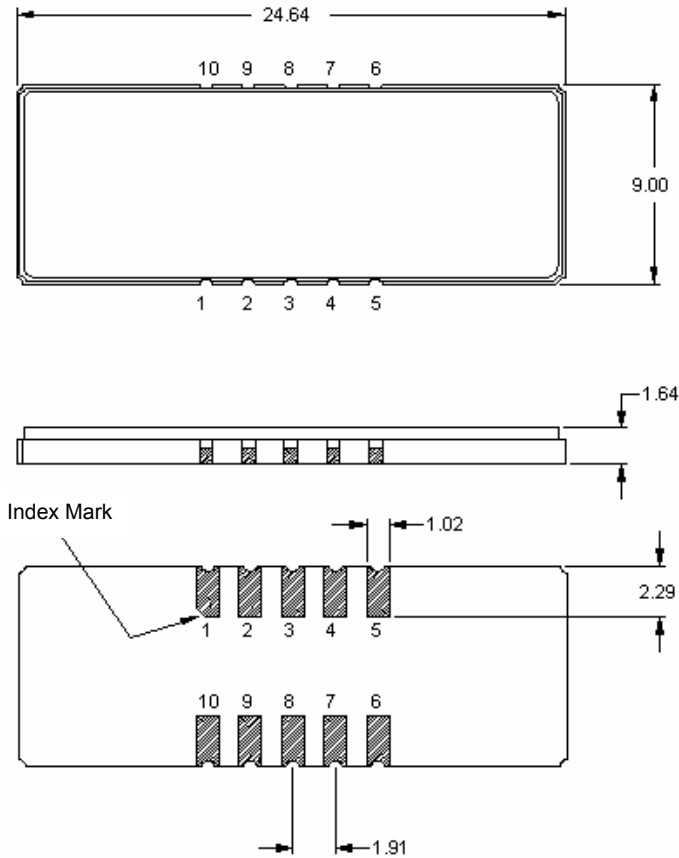
Typical Values:

Rp1 = 1 KΩ	Ls1 = 33 nH	Cp1 = 51 pF
Rp2 = 1 KΩ	Ls2 = 36 nH	Cp2 = 10 pF

Notes:

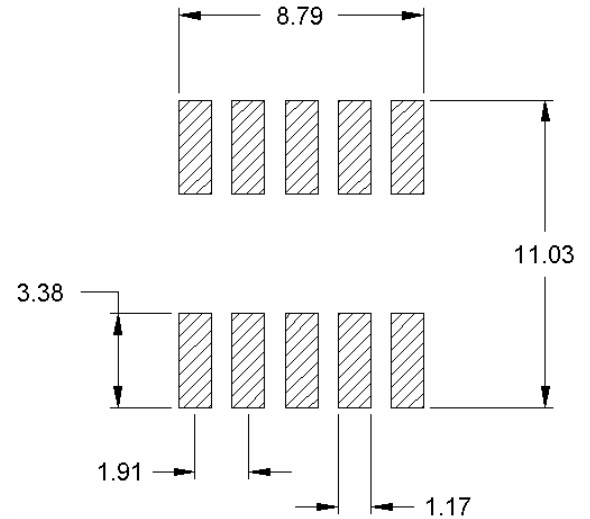
1. Recommend +/-5% tolerance inductors. Typical inductor Q=45.
2. Component values shown are for reference only and may change depending on board layout.

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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