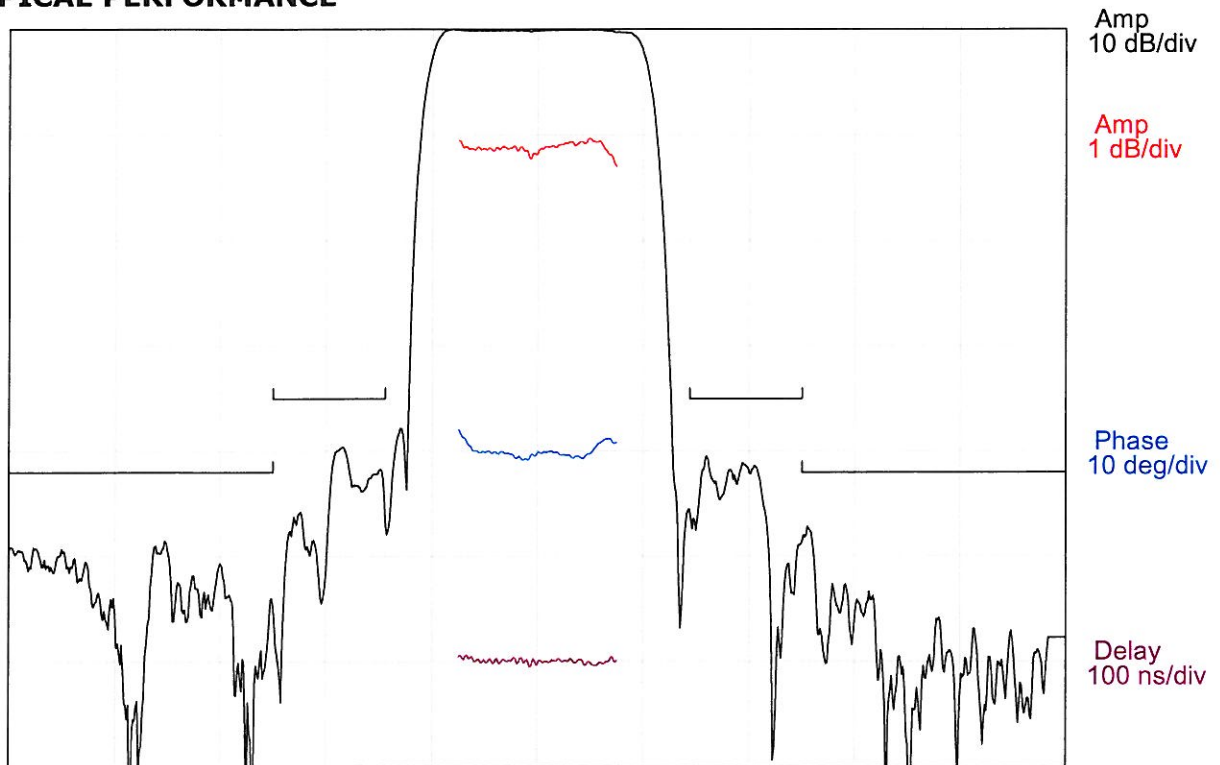


DESCRIPTION

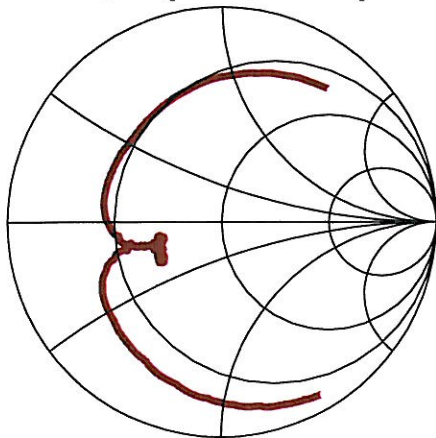
- 140 MHz bandpass filter with 16 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC, 12 pads.
- RoHS compliant.

TYPICAL PERFORMANCE

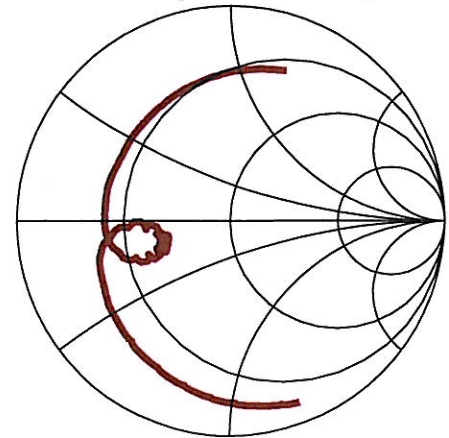


Center = 140 MHz, 10 MHz/div (125 kHz incr)

S11 (90-190 MHz)



S22 (90-190 MHz)



SPECIFICATION

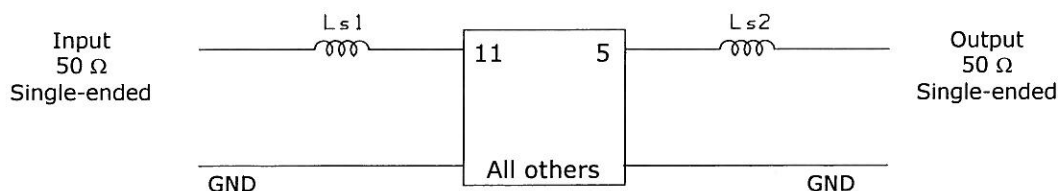
Parameter	Min	Typ	Max	Units
Center Frequency, F_c ¹	-	140	-	MHz
Minimum Insertion Loss	-	11.4	13	dB
1 dB Bandwidth ²	15	19	-	MHz
3 dB Bandwidth ²	16	20.4	-	MHz
Amplitude Ripple ($F_c \pm 7.5$ MHz)	-	0.3	1	dB p-p
Phase Ripple ($F_c \pm 7.5$ MHz)	-	3	6	deg p-p
Group Delay Ripple ($F_c \pm 7.5$ MHz)	-	15	40	ns p-p
Triple Transit Response	45	60	-	dB
Rejection (115 to 125.6 MHz)	35	39	-	dB
Rejection (154.4 to 165 MHz)	35	39	-	dB
Rejection (20 to 115 MHz)	42	47	-	dB
Rejection (165 to 300 MHz)	42	47	-	dB
Temperature Coefficient	-	-94	-	ppm/ $^{\circ}$ C
Source/Load Impedance	50			ohms
Ambient Temperature, T_c	25			$^{\circ}$ C

- Notes: 1. Defined as the average of the lower and upper 3 dB frequencies at room ambient.
2. All dB levels are defined relative to the insertion loss.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}$ C
Operating Temperature Range	-40	85	$^{\circ}$ C
Input Power Level	-	+13	dBm

MATCHING CIRCUIT

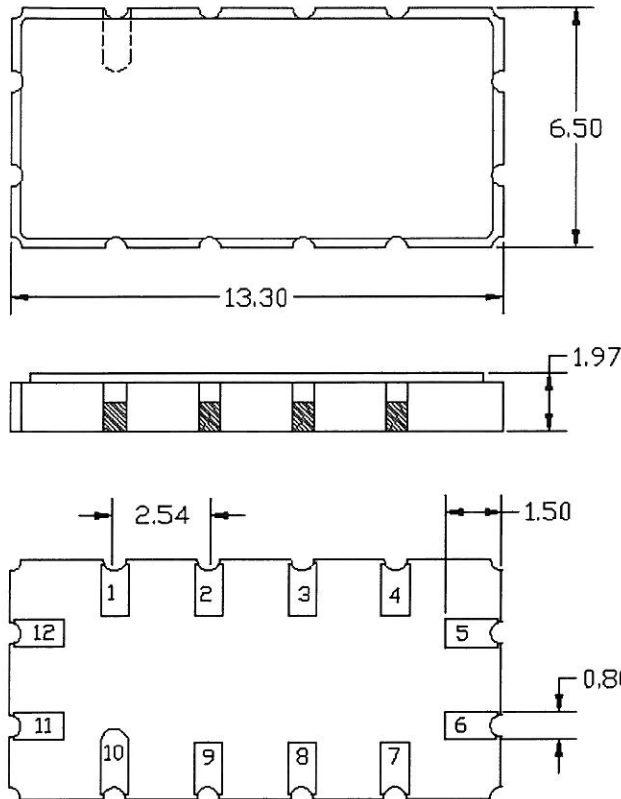


$$L_{s1} = 120 \text{ nH}, L_{s2} = 93 \text{ nH}$$

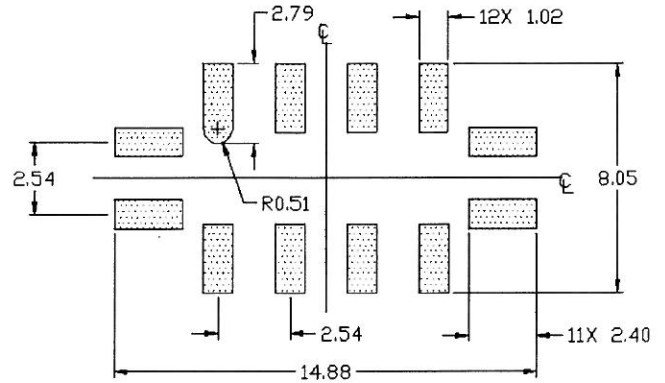
Notes:

- Recommend $\pm 2\%$ toleranced components. Typical inductor $Q=40$.
- Values shown are for reference only and may change depending on board layout.

PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Units: mm

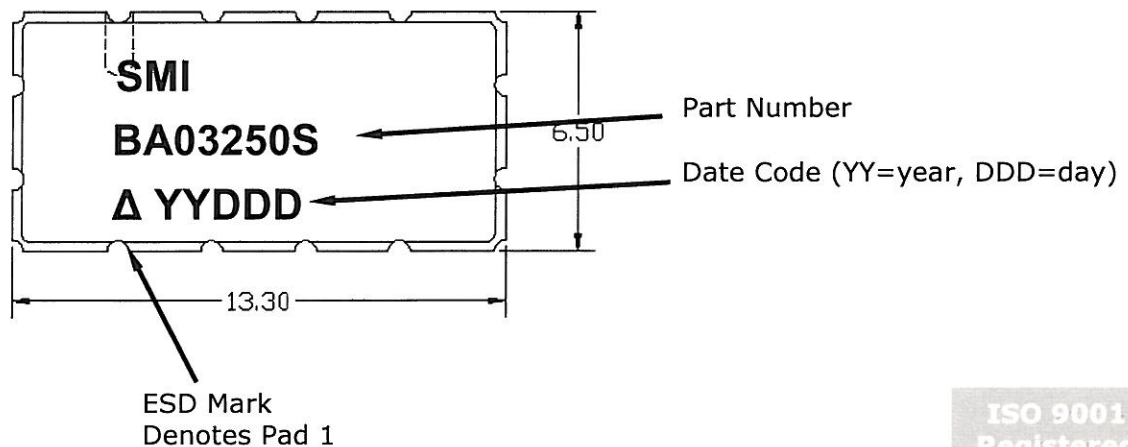
Tolerances are ± 0.15 mm except where indicated.

Pad Configuration:

Input: 11
Output: 5
Ground: All other pads

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

MARKING



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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