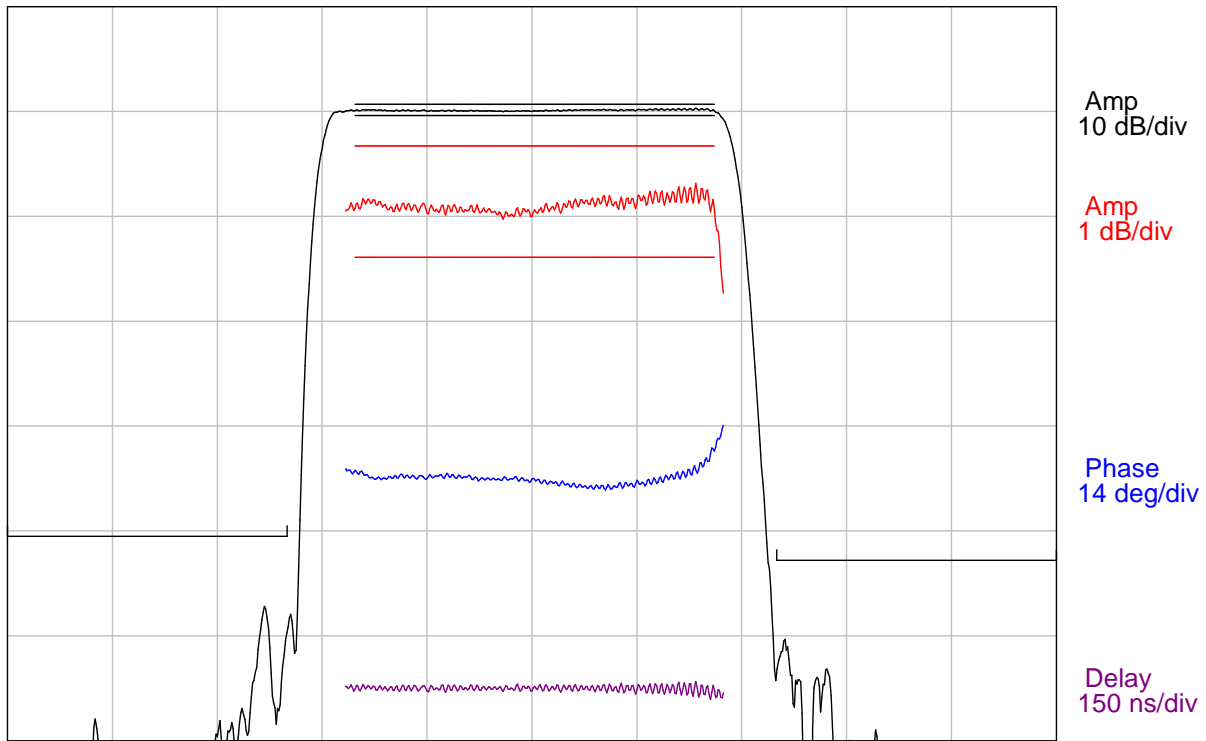


DESCRIPTION

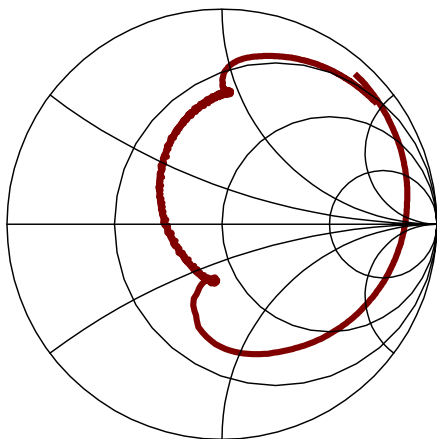
- 120 MHz SAW bandpass filter with 42 MHz bandwidth.
- 13.3 x 6.5 mm ceramic LCC package, 12 pads.
- RoHS compliant.

TYPICAL PERFORMANCE

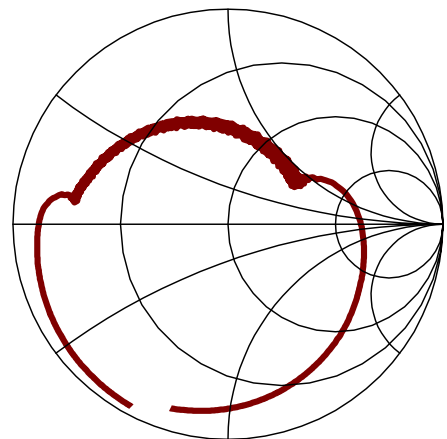


Center = 120 MHz, 12 MHz/div (150 kHz incr)

S11 (60-180 MHz)



S22 (60-180 MHz)



SPECIFICATION

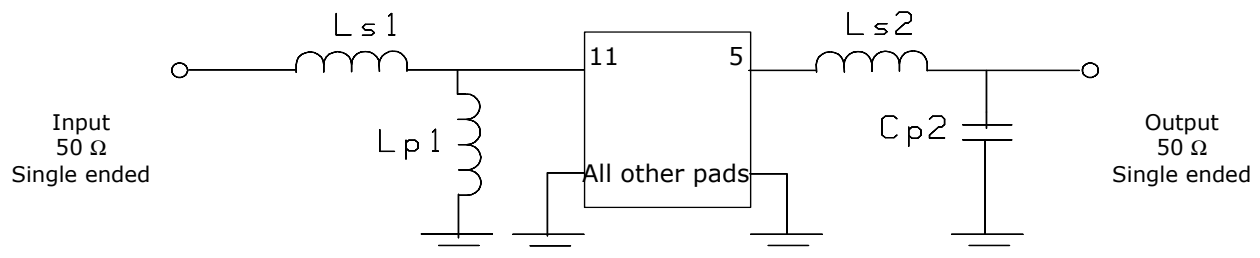
Parameter	Min	Typ	Max	Units
Center Frequency, F_c ¹	-	120	-	MHz
Insertion Loss at F_c	-	15.7	18	dB
Lower 1 dB Frequency ²	-	96.7	99	MHz
Upper 1 dB Frequency ²	141	142.1	-	MHz
Lower 40 dB Frequency ²	92	93.4	-	MHz
Upper 40 dB Frequency ²	-	146.7	148	MHz
Passband Amplitude Variation ³	-	0.5	1.2	dB p-p
Passband Amplitude Variation ⁴	-	0.5	1.7	dB p-p
Passband Amplitude Variation ⁵	-	0.5	1.5	dB p-p
Phase Deviation from Linear ⁴	-	5	14	deg p-
Group Delay Deviation ⁴	-	40	140	ns p-p
Absolute Delay	-	0.8	1.2	us
System Source and Load Impedance	-	50	-	Ω
Ambient Temperature	-	25	-	$^{\circ}\text{C}$

- Notes:
1. Reference frequency. Computed as mean of the 3 dB frequencies.
 2. All dB values are referenced to the insertion loss value.
 3. Evaluated over 100 to 140 MHz
 4. Evaluated over 99 to 141 MHz.
 5. Evaluated over 99 to 140 MHz.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}\text{C}$
Operating Temperature Range	0	85	$^{\circ}\text{C}$
Input Power Level	-	10	dBm

MATCHING CIRCUIT

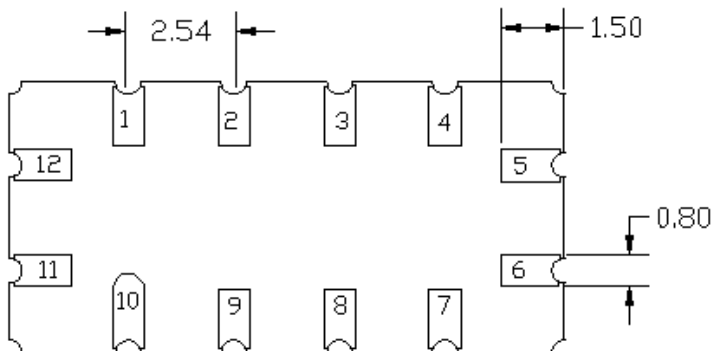
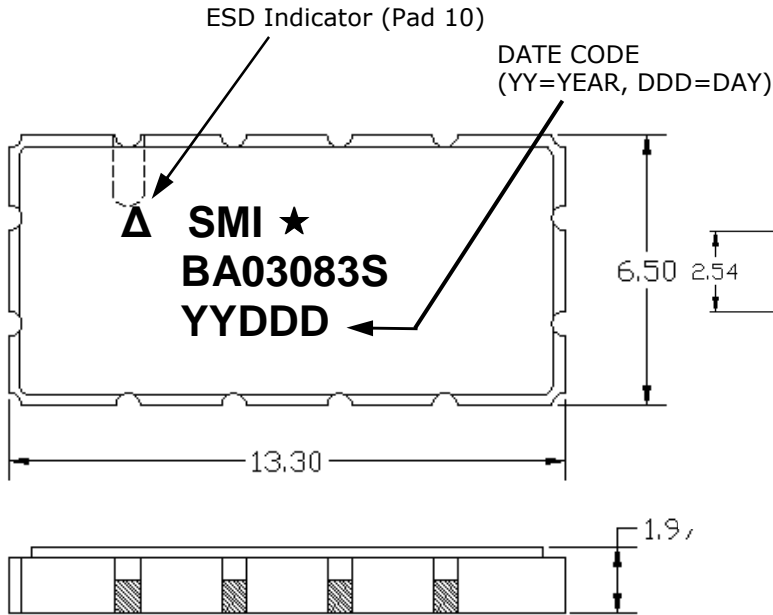


$$L_{p1} = 82 \text{ nH}, L_{s1} = 68 \text{ nH}, L_{p2} = 68 \text{ nH}, C_{p2} = 27 \text{ pF}$$

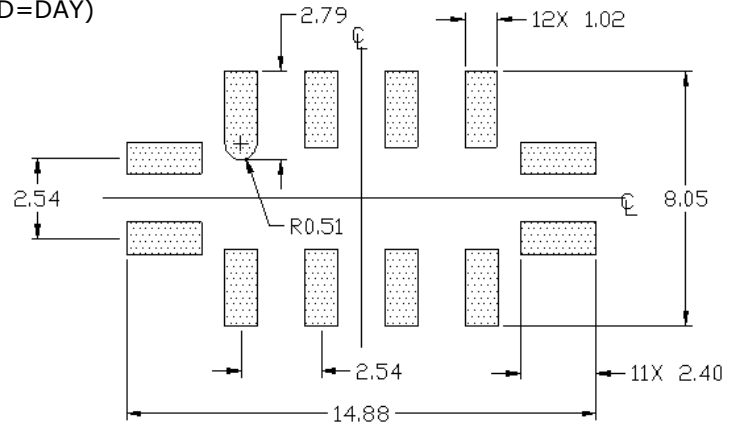
Notes:

- Recommend 2% or better tolerance matching components. Typical inductor $Q=40$.
- Optimum values may change depending on board layout. Values shown are intended as a guide only.

PACKAGE OUTLINE & MARKING



SUGGESTED FOOTPRINT



Units: mm

Tolerances are typically ± 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

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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