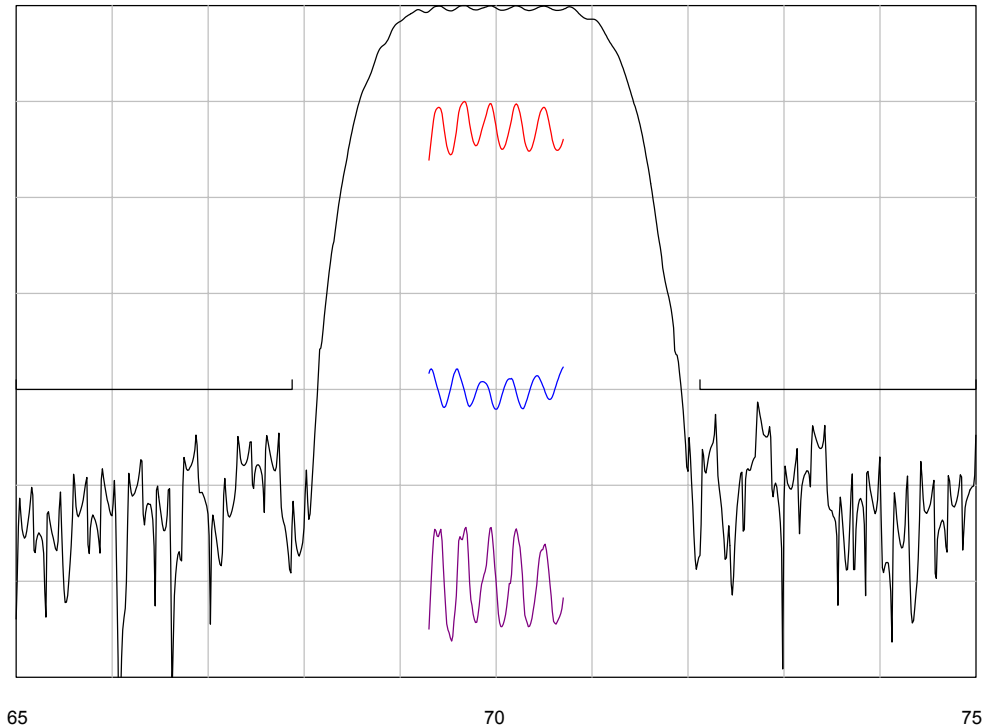


DESCRIPTION

- 70 MHz SAW bandpass filter with 2 MHz bandwidth.
- 19 X 6.5 mm ceramic LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE



Vertical from top: Relative Magnitude : 10 dB/div
 Relative Magnitude : 1 dB/div
 Phase Linearity : 10 deg/div
 Group Delay Deviation: 200 ns/dev

MAXIMUM RATING

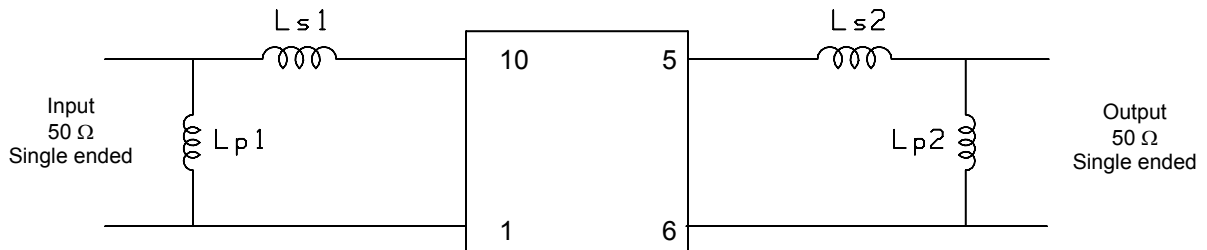
Parameter	Min	Max	Units
Operating Temperature Range	0	70	°C
Storage Temperature Range	-40	85	°C
Input Power Level		13	dBm

SPECIFICATION

Parameter ²	Min.	Typ.	Max.	Units.
Center Frequency (Fc) ¹	69.92	70.0	70.08	MHz
Insertion Loss		7.9	8.3	dB
1 dB Bandwidth	1.6	1.77		MHz
3 dB Bandwidth	2.0	2.24		MHz
40 dB Bandwidth		3.75	3.9	MHz
Passband Ripple (69.2 to 70.8 MHz)		0.7	1.0	dB p-p
Phase Ripple (69.2 to 70.8 MHz)		4.4	6	deg p-p
Group Delay Ripple (69.2 to 70.8 MHz)		280	340	ns p-p
Absolute Delay		1.80		us
Ultimate Rejection	40	43		dB
Temperature Coefficient of Frequency		-23		ppm/°C
Substrate Material	112 LiTaO3			
Source and Load Impedance	50			Ω
Ambient Temperature		25		°C

- Notes:
1. Average of the lower and upper 3 dB band edge frequencies.
 2. All dB levels are referenced to the insertion loss.
 3. Specifications are guaranteed at 25°C only.

MATCHING CIRCUIT



Typical component values:

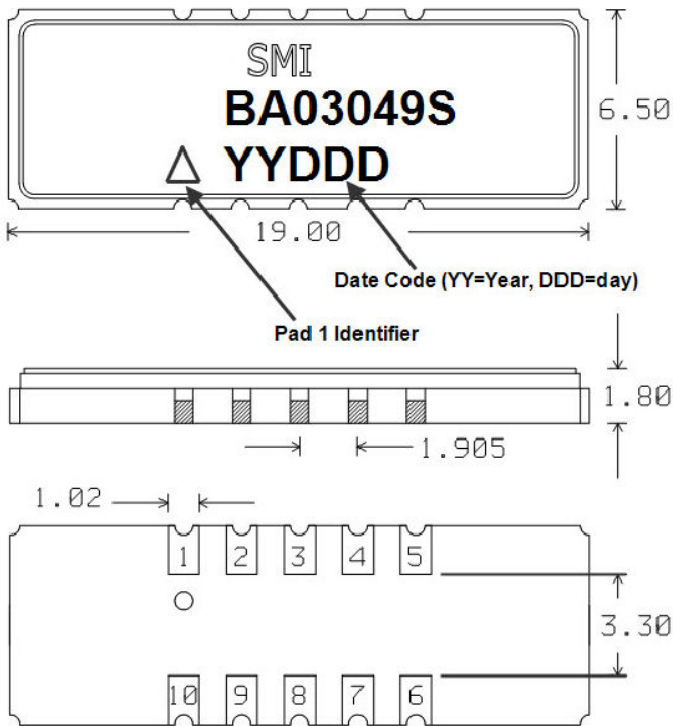
(Minimum inductor Q =

Ls1 = 220 nH	Ls2 = 180 nH	40)
Lp1 = 91 nH	Lp2 = 68 nH	

Notes:

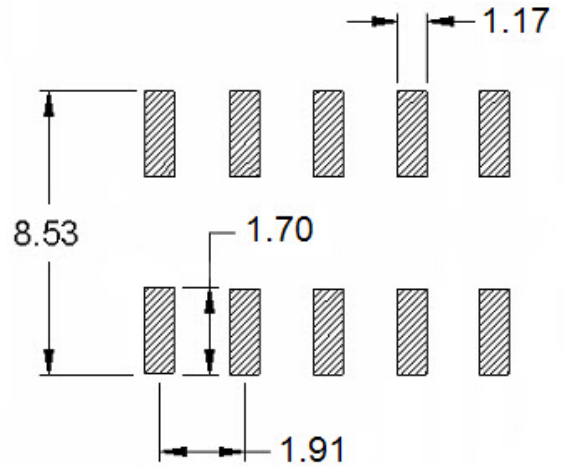
1. Recommend use of 2% tolerance matching components.
2. Component values may change depending on board layout.

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 for the overall length and
width, which are nominal.

Pin 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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