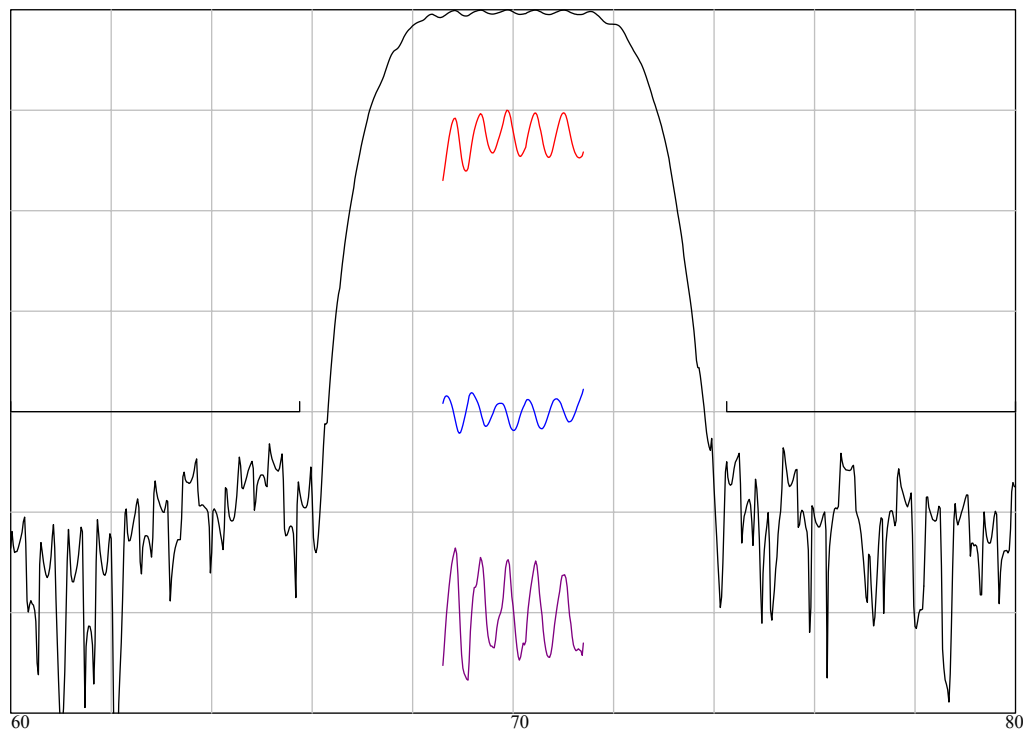


DESCRIPTION

- 70 MHz low loss SAW filter in 19 x 6.5 mm LCC package for general communications applications.
- 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 : 100 ns/div

SPECIFICATION

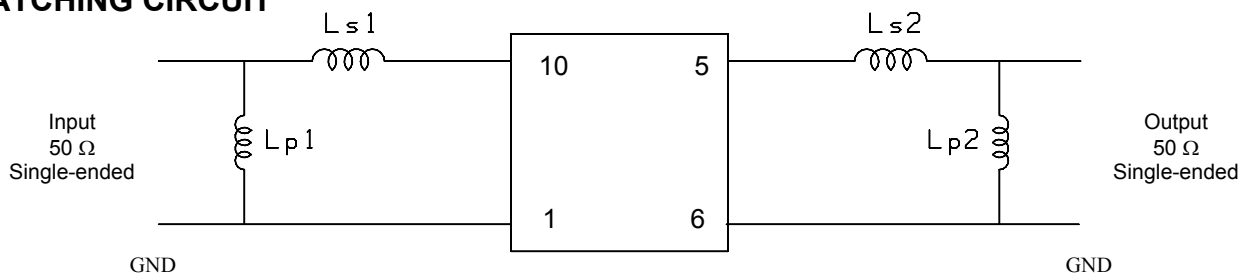
Parameter ²	Min	Typ	Max	Units
Center Frequency (Fc) ¹	69.88	70.00	70.12	MHz
Insertion Loss		9.7	10.0	dB
1 dB Bandwidth	2.00	2.21		MHz
3 dB Bandwidth	2.50	2.75		MHz
40 dB Bandwidth		4.37	5.10	MHz
Passband Ripple (80% of 1 dB Bandwidth)		0.6	1.0	dB p-p
Phase Linearity (70% of 3 dB Bandwidth)		3.5	9.0	deg p-p
Group Delay Variation (70% of 3 dB Bandwidth)		150	400	ns p-p
Absolute Delay		1.8		us
Ultimate Rejection	40	50		dB
Source and Load Impedance		50		Ω
Input Power		+10	+13	dBm
Temperature Coefficient of Fc		-23		ppm/°C
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.

MAXIMUM RATINGS

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

MATCHING CIRCUIT



Typical component values:
(Minimum inductor Q = 40)

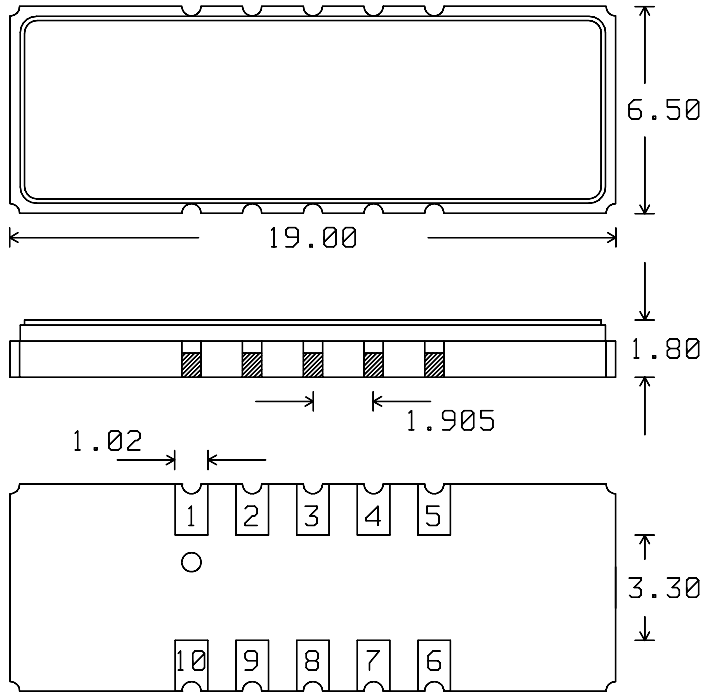
$$\begin{aligned} L_{s1} &= 270 \text{ nH} \\ L_{p1} &= 68 \text{ nH} \end{aligned}$$

$$\begin{aligned} L_{s2} &= 270 \text{ nH} \\ L_{p2} &= 68 \text{ nH} \end{aligned}$$

Notes:

1. Recommend use of 2% tolerance matching components.
2. Component values shown are for guidance only and may change depending on board layout.

PACKAGE OUTLINE



Units: mm

Dimensions are nominal in mm. All tolerances are ± 0.15 mm except overall length and width.

Pad Configuration:

Input:	10
Input Return:	1
Output:	5
Output Return:	6
Ground:	2, 3, 4, 7, 8, 9

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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