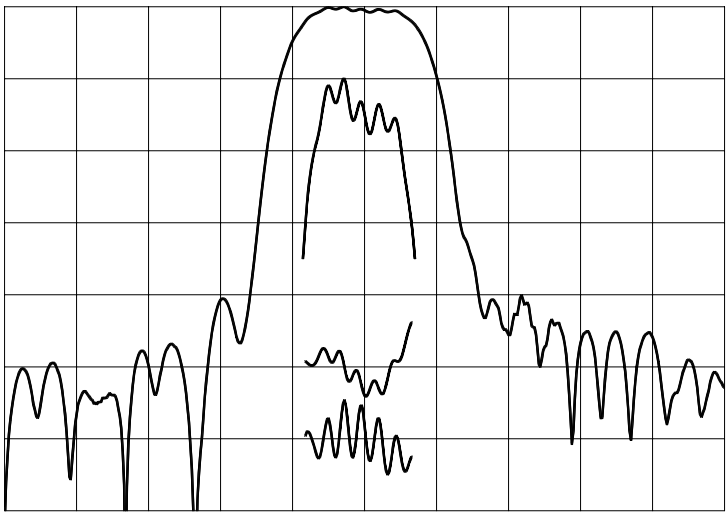
Micro Networks
An Integrated Circuit Systems Company

70 MHz Filter
1.5 MHz Bandwidth
Part Number
SF0070BA03048S

Micro Networks, 324 Clark Street, Worcester, MA 01606, USA tel: 508-852-5400, fax:508-852-8456, www.micronetworks.com

TYPICAL PERFORMANCE



Horizontal: 1 MHz/div Vertical (from top):

Magnitude	10,1	dB/div
Phase Deviation	10	deg/div
Group Delay Variation	250	ns/div

SPECIFICATION

Parameter	Min	Typ	Max	Units
Center Frequency (Fc) [1]	69.90	70.00	70.10	MHz
Insertion Loss		8.4	8.75	dB
1 dB Bandwidth	1.0	1.35		MHz
3 dB Bandwidth	1.5	1.69		MHz
36 dB Bandwidth		3.1	3.3	MHz
Passband Ripple		0.8	1.0	dB
Phase Deviation from Linear [2]		5.7	7.0	deg
Group Delay Variation [2]		245	425	ns
Absolute Delay		2.1		µs
Substrate		$LiTaO_3$		-
Temperature Coefficient of Frequency (Tc) [3]		-23		ppm/°C
Ambient Temperature		25		°C
System Source and Load Impedance		50		Ω

Notes: 1. Average of lower & upper 3 dB frequencies.
2. Evaluated over 60% of the 3 dB bandwidth.
3. Typical change of filter frequency response with temperature is $\Delta f/f_{ref} = (T-T_{ref})*Tc$ ppm.

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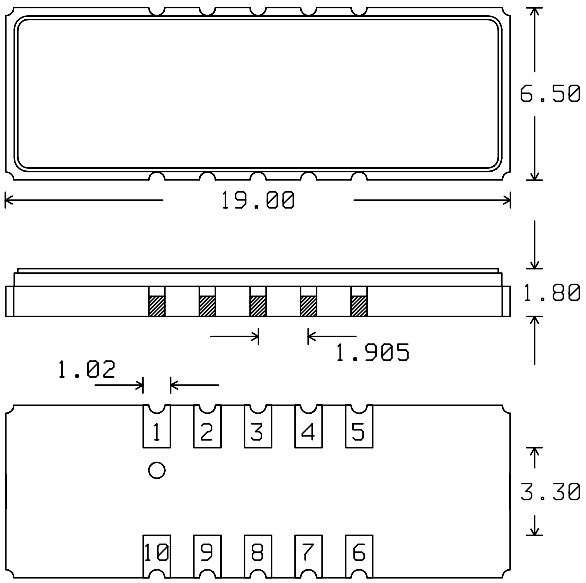
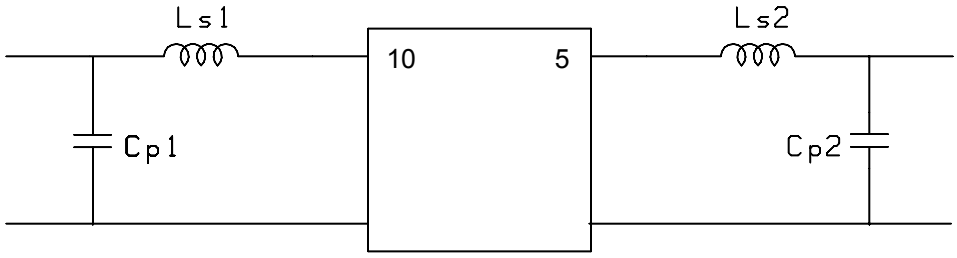
PACKAGE OUTLINE



Units: mm

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

MATCHING CIRCUIT



Component values in 50 Ω:	Ls1 = 120 nH	Ls2 = 150 nH
(Minimum Q = 40)	Cp1 = 82 pF	Cp2 = 82 pF

Notes

- Optimum component values may change depending on board layout. The values shown here are intended as a guide only.

ISO 9001 Registered