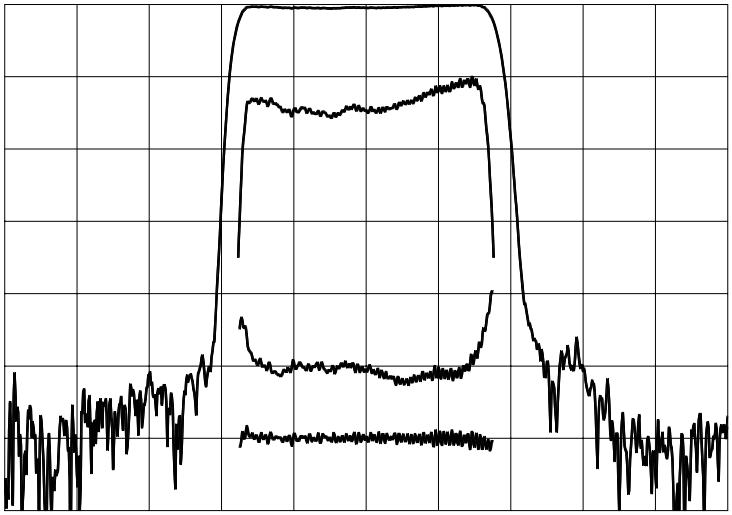
Micro Networks
An Integrated Circuit Systems Company

70 MHz Filter

Part Number
SF0070BA03045S

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

TYPICAL PERFORMANCE



Horizontal: 8 MHz/div

Vertical (from top):

Magnitude	10	dB/div
Magnitude	1	dB/div
Phase Deviation	5	deg/div
Group Delay Variation	100	ns/div

SPECIFICATION

Parameter	Min	Typ	Max	Units
Center Frequency (Fc) [1]	69.8	70.00	70.2	MHz
Insertion Loss		18.2	19.0	dB
1 dB Bandwidth	27.2	27.5		MHz
3 dB Bandwidth	28.0	28.6		MHz
40 dB Bandwidth		34.2	34.65	MHz
Passband Ripple		0.6	1.0	dB
Phase Deviation from Linear [2]		3	11.5	deg
Group Delay Variation [2]		30	120	ns
Absolute Delay		1.12		µs
Substrate		$LiNbO_3$		-
Temperature Coefficient of Frequency (Tc) [3]		-90		ppm/°C
Ambient Temperature		25		°C
System Source and Load Impedance		50		Ω

Notes: 1. Average of lower & upper 3 dB frequencies (3 dB measured from peak).
2. Evaluated over 90% 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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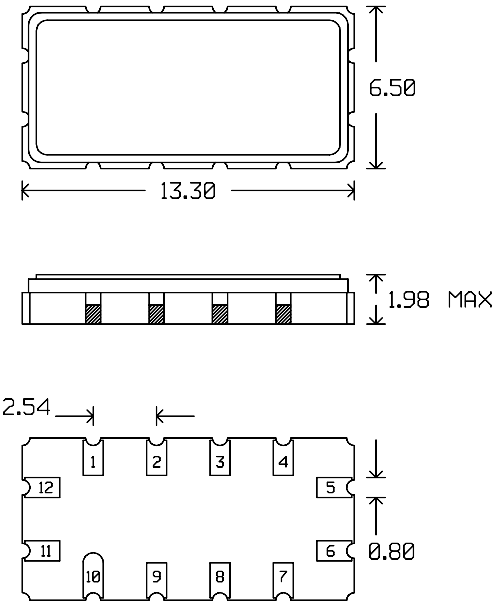
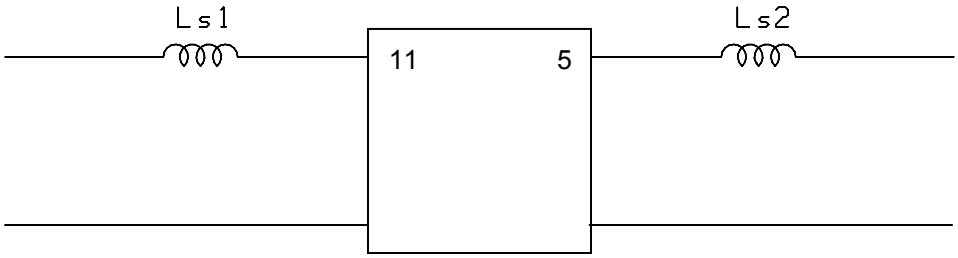
PACKAGE OUTLINE



Units: mm

Pin Configuration:
Input: 11
Output: 5
Ground: 1,2,3,4,6,7,8,9,10,12

MATCHING CIRCUIT



Component values in 50 Ω: Ls1 = 120 nH Ls2 = 100 nH
(Minimum Q = 40)

Notes

- Optimum component values may change depending on board layout. The values shown here are intended as a guide only.
- Requires 2% matching components.