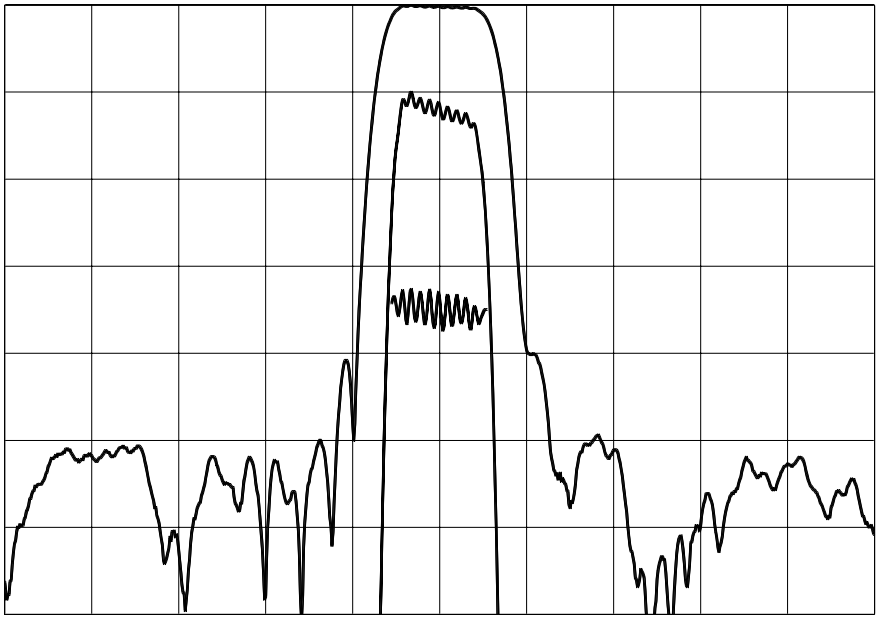
Micro Networks
An Integrated Circuit Systems Company

140 MHz Low-Loss Filter
4 MHz Bandwidth
Part Number SF0140BA03068S

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

TYPICAL PERFORMANCE



Horizontal: 4.0 MHz/div Vertical (from top): Magnitude 10 dB/div
Magnitude 1 dB/div
Group Delay 100 ns/div

SPECIFICATION

Parameter	Min.	Typ.	Max.	Units.
Center Frequency (Fc) [1]	139.6	140.0	140.4	MHz
Insertion Loss		12.0	12.5	dB
1 dB Bandwidth	3.4	4.1		MHz
3 dB Bandwidth	4.0	4.86		MHz
40 dB Bandwidth		7.75	9.1	MHz
Passband Ripple [2]		0.4	1.0	dB p-p
Phase Ripple [2]		2.0	6.0	deg p-p
Group Delay Ripple [2]		50	100	ns p-p
Absolute Delay		1.2		us
Ultimate Rejection	40	50		dB
Temperature Coefficient of Frequency		-18		ppm/° C
Substrate Material	Lithium Tantalate			
Source and Load Impedance	50			Ω
Ambient Temperature		25		° C

Notes:
1. Mean Value of 3 dB points. 3dB measured from peak.
2. Measured over 90% of minimum 3 dB Bandwidth

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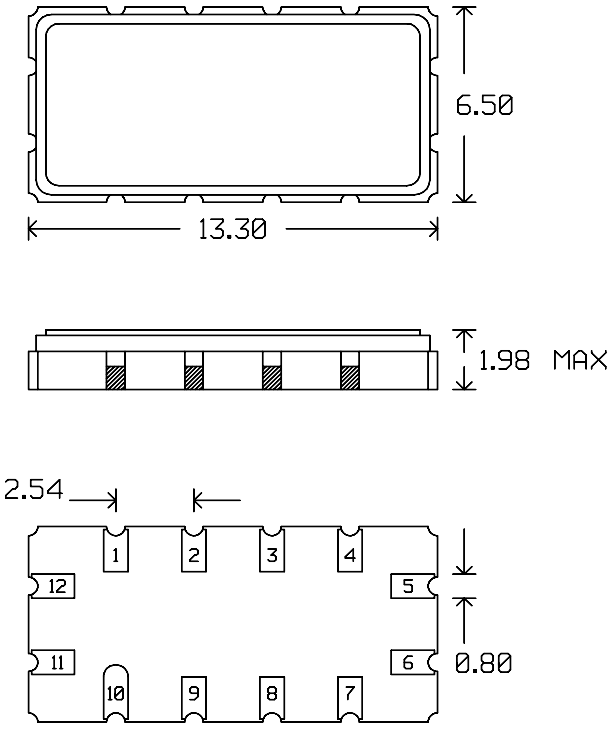
PACKAGE OUTLINE

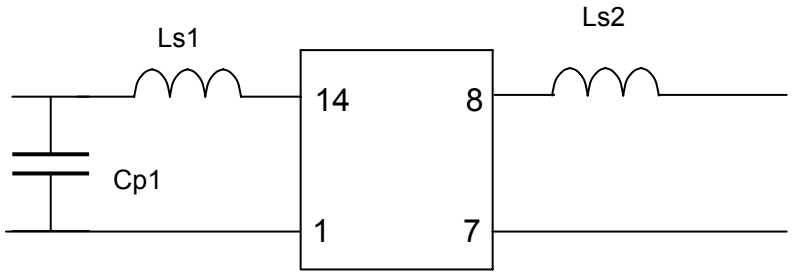


Units: mm

Pin Configuration:

Input:	11
Input Return:	12
Output:	5
Output Return:	6
Ground:	All other pins

MATCHING CIRCUIT



Component values:

Ls1 = 139 nH Ls2 = 112 nH (Minimum Q = 45)

Cp1 = 39 pF

Notes

1. Recommend use of 5% tolerance components.
2. Optimum values depend on board layout. Values intended as guide only.

ISO 9001 Registered