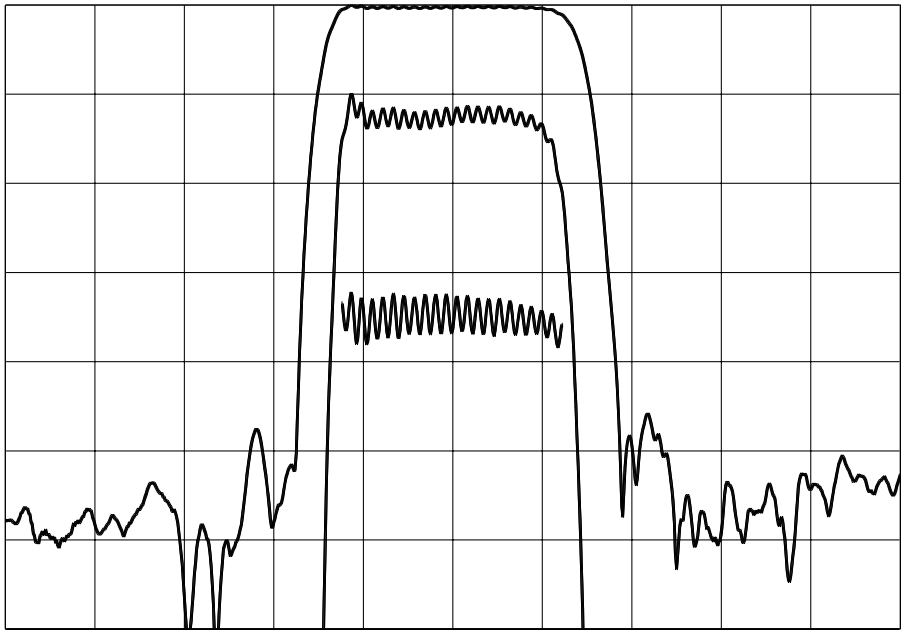
Integrated
Circuit
Systems, Inc.

140.0 MHz Low-Loss Filter
10.0 MHz Bandwidth
Part Number SF0140BA03070S

TYPICAL PERFORMANCE



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

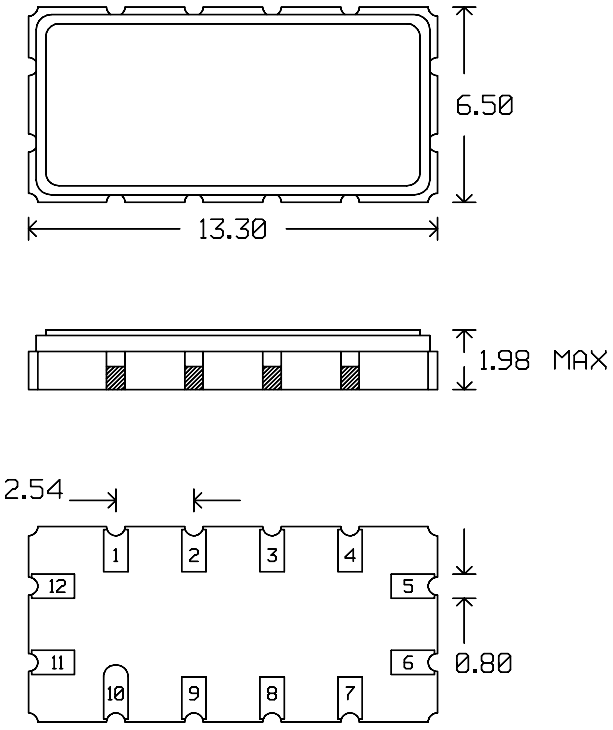
SPECIFICATION

Parameter	Min.	Typ.	Max.	Units.
Center Frequency (Fc) [1]	139.6	140.0	140.4	MHz
Insertion Loss		10.2	11.0	dB
1 dB Bandwidth	8.0	10.2		MHz
3 dB Bandwidth	10.0	11.1		MHz
35 dB Bandwidth		14.0	15.0	MHz
Passband Ripple [2]		0.5	1.0	dB p-p
Phase Ripple [2]		6.0	15	deg p-p
Group Delay Ripple [2]		75	120	ns p-p
Absolute Delay		1.06		us
Ultimate Rejection	40	50		dB
Temperature Coefficient of Frequency		-94		ppm/° C
Substrate Material	YZ Lithium Niobate			
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 3 dB Bandwidth

Integrated Circuit Systems • Surface Acoustic Wave Products
324 Clark Street, Worcester, MA 01606, USA • Phone 508-852-5400 • Fax 508-852-8456
www.icst.com

PACKAGE OUTLINE

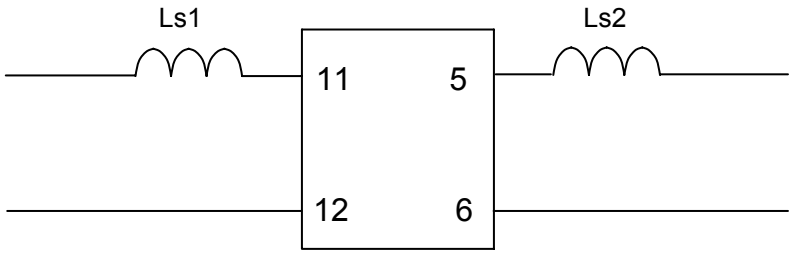


Units: mm

Pin Configuration:

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

MATCHING CIRCUIT



Component values:
Ls1 = 47 nH Ls2 = 100 nH (Minimum Q = 45)

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

ISO 9001
Registered

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