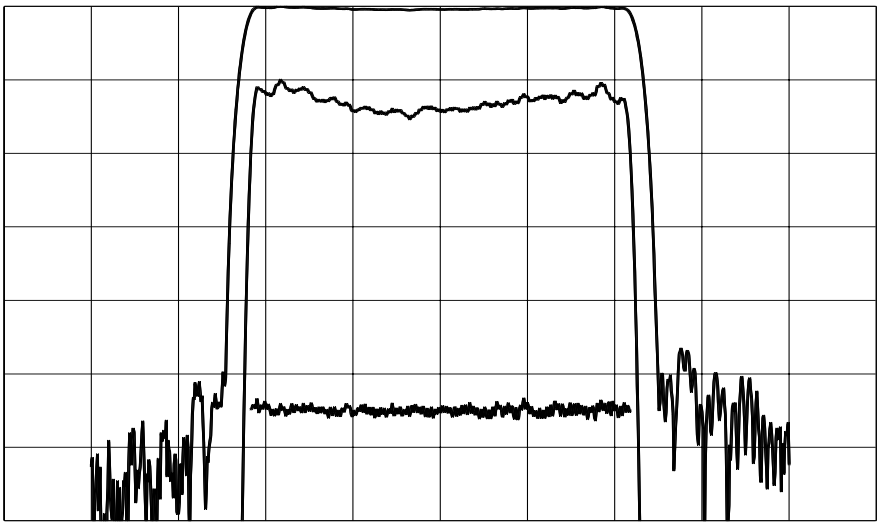
Micro Networks
An Integrated Circuit Systems Company

140.0 MHz Filter

Part Number SF0140BA01969T

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

TYPICAL PERFORMANCE



Horizontal: 10.0 MHz/div Vertical (from top): Magnitude 10 dB/div
Magnitude 1 dB/div
Group Delay 50 ns/div

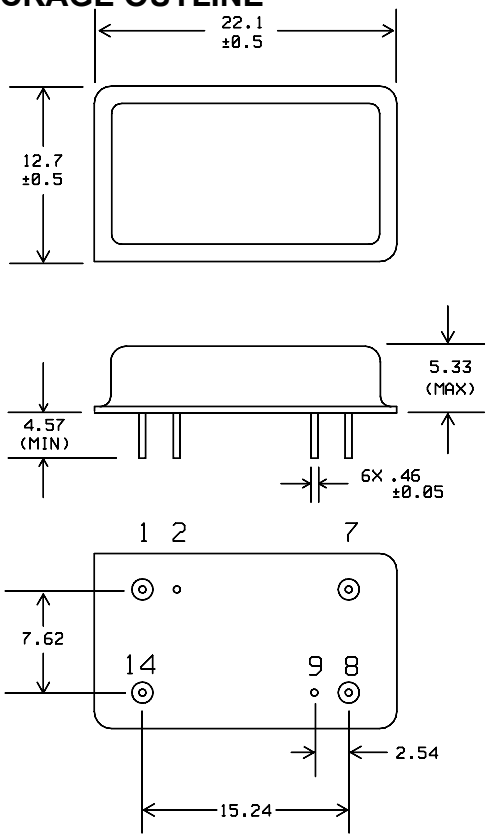
SPECIFICATION

Parameter	Min.	Typ.	Max.	Units.
Center Frequency [1]	139.75	140.0	140.25	MHz
Insertion Loss [2]		23.5	25.0	dB
1 dB BW	41,5	43.5		MHz
3 dB BW	43.5	44.5		MHz
40 dB BW		49.0	50.0	MHz
Amplitude ripple(Fc ± 7 MHz)		0.4	0.7	dB p-p
Phase ripple(Fc ± 7 MHz)		2.5	5	deg. p-p
Group delay ripple(Fc ± 7 MHz)		15	40	ns p-p
Absolute delay		1.1		us
Ultimate rejection	50	60		dB
Ambient Temperature [3]	-25		70	deg C
Substrate material	128 Lithium Niobate			

Notes:
1: Measured at 23 deg. C
2: Mean value over Fc ± 7 MHz
3: The device center frequency will shift by -80 ppm/deg. C typical over operating temperature

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

PACKAGE OUTLINE

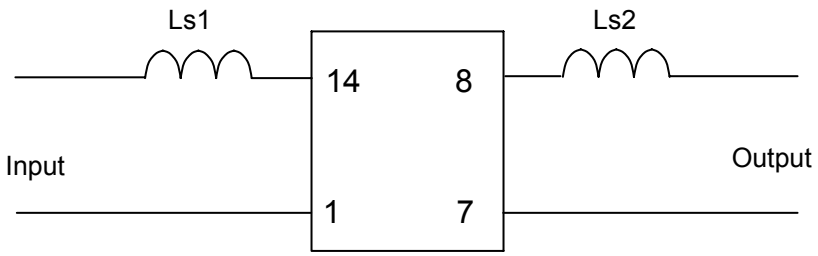


Units: mm

Pin Configuration:

Input:	14
Input Return:	1
Output:	8
Output Return:	7
Ground:	all other pins

MATCHING CIRCUIT



Component values:

Ls1 = 47 nH Ls2 = 56 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