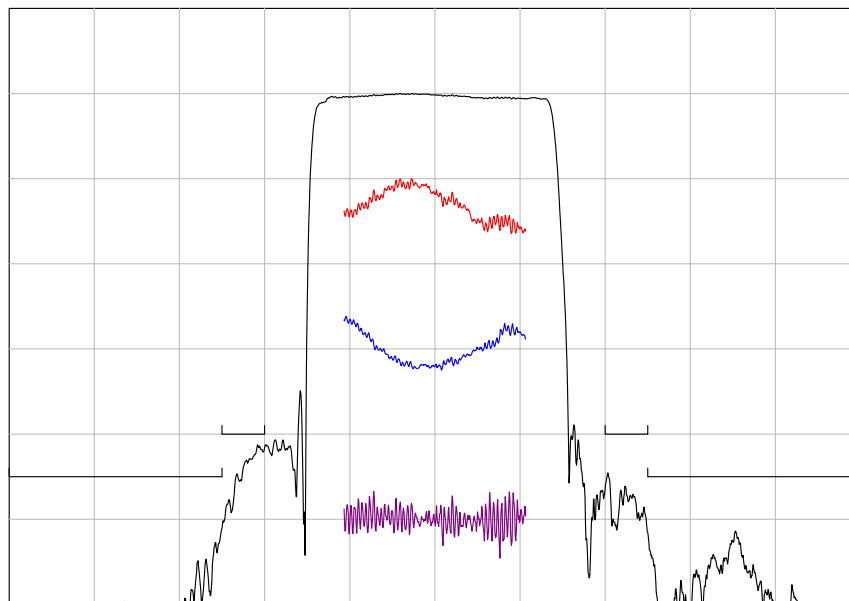




TYPICAL PERFORMANCE



Horizontal: 12 MHz/div Vertical (from top):
 Magnitude 10 dB/div
 Magnitude 1 dB/div
 Phase Deviation 10 deg/div
 Group Delay 50 ns/div

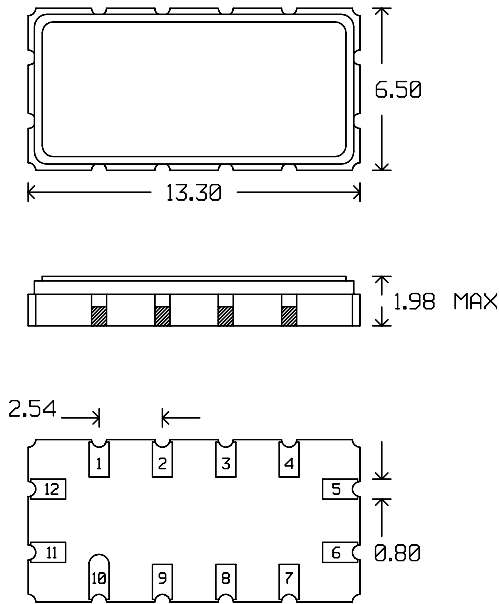
SPECIFICATION

Parameter ²	Min	Typ	Max	Units
Center Frequency (Fc) ¹	139.60	140.00	140.40	MHz
Minimum Insertion Loss		11.8	13	dB
3 dB Bandwidth	32	33.60		MHz
35 dB Bandwidth		36.85	38	MHz
40 dB Bandwidth		39.10	44	MHz
Passband Ripple (127.2 to 152.8 MHz)		0.6	1.0	dB p-p
Phase Linearity (127.2 to 152.8 MHz)		7.5	10	deg p-p
Group Delay Variation (127.2 to 152.8 MHz)		40	60	ns p-p
Absolute Delay		0.93		us
Rejection (80 to 110 MHz)	45	50		dB
Rejection (110 to 116 MHz)	40	42		dB
Rejection (164 to 170 MHz)	40	42		dB
Rejection (170 to 200 MHz)	45	50		dB
Source and Load Impedance		50		Ω
Substrate		LiNbO ₃		-
Temperature Coefficient of Frequency		-94		ppm/ $^{\circ}$ C
Ambient Temperature		25		$^{\circ}$ C

Notes: 1. Average of the lower and upper 3 dB band edge frequencies.
 2. All dB levels are referenced to the insertion loss.



PACKAGE OUTLINE

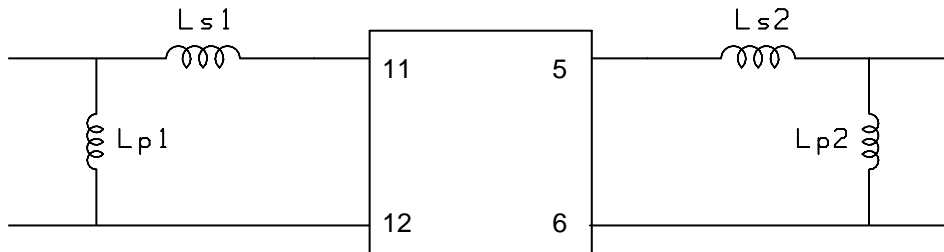


Units: mm

Pin Configuration:

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

MATCHING CIRCUIT



Typical component values: $L_{s1} = 39 \text{ nH}$ $L_{s2} = 39 \text{ nH}$
 $L_{p1} = 47 \text{ nH}$ $L_{p2} = 39 \text{ nH}$
 (minimum inductor Q = 45)

Notes

- Recommend 2% tolerance matching components.
- Tuning values shown are for reference only. Optimum values may change depending upon board layout.

