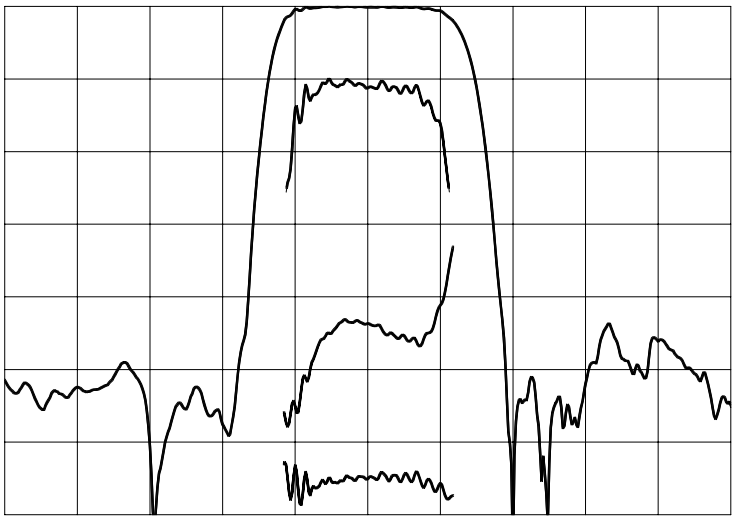
140 MHz SAW Filter
7 MHz Bandwidth
Part Number: SF0140BA03069S

TYPICAL PERFORMANCE



Horizontal: 3 MHz/div

Vertical (from top):

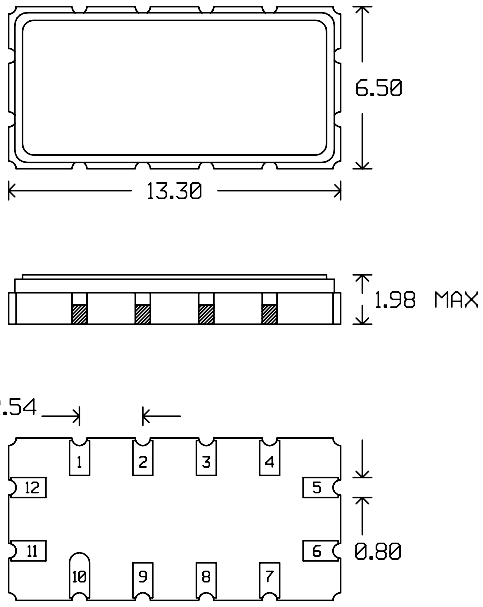
Magnitude	10,1	dB/div
Phase Deviation	10	deg/div
Group Delay Variation	200	ns/div

SPECIFICATION

Parameter	Min	Typ	Max	Units
Center Frequency (Fc) [1]	139.6	140	140.4	MHz
Insertion Loss		7.2	8.0	dB
1 dB Bandwidth	5.9	6.3		MHz
3 dB Bandwidth	7.0	7.3		MHz
36 dB Bandwidth		10.2	10.7	MHz
Passband Ripple		0.4	1	dB
Phase Deviation from Linear [2]		7	14	deg
Group Delay Variation [2]		60	200	ns
Absolute Delay		1.1		µs
Substrate		YZ $LiNbO_3$		-
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.
2. Evaluated over 70% of the 3 dB bandwidth.
3. Typical change of filter frequency response with temperature is $\Delta f/f_{ref} = (T-T_{ref})*Tc$ ppm.

PACKAGE OUTLINE

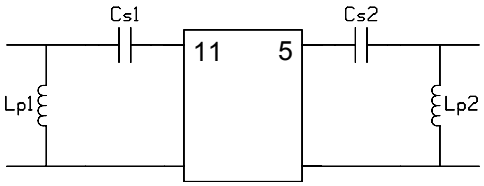


Units: mm

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

Component values in 50 Ω: Cs1 = 220 pF

MATCHING CIRCUIT



(Minimum Q = 45) Lp1 = 33 nH Lp2 = 33 nH

Notes

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

ISO 9001 Registered