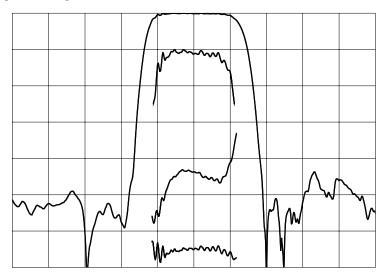
140 MHz SAW Filter 7 MHz Bandwidth

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	Тур	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

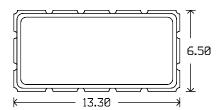
Notes: 1. Average of lower & upper 3 dB frequencies.

- 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.

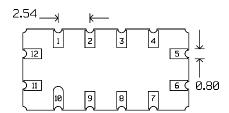
140 MHz SAW Filter
7 MHz Bandwidth

Part Number: SF0140BA03069S

PACKAGE OUTLINE







Units: mm

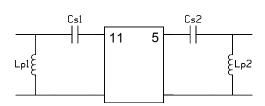
Pin Configuration:

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

All specifications are believed to be accurate and reliable. However, ICS reserves the right to make changes without notice.

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