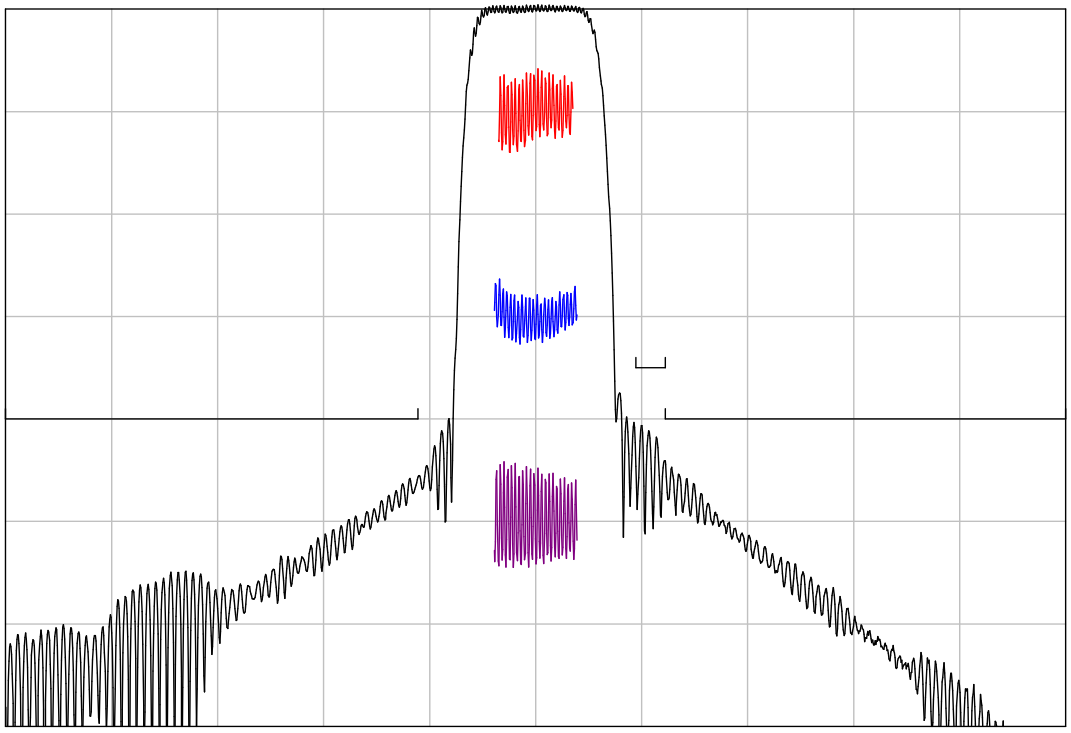
240 MHz SAW Filter
14 MHz Bandwidth
Part Number: SF0240BA11987S

DESCRIPTION

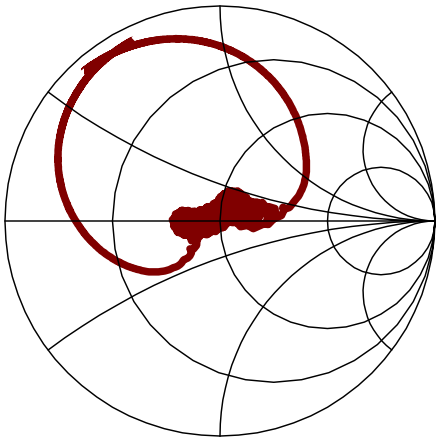
- 240 MHz SAW bandpass filter with 14 MHz bandwidth.
- 7 x 5 mm ceramic LCC, 12 pads.
- RoHS compliant.

TYPICAL PERFORMANCE

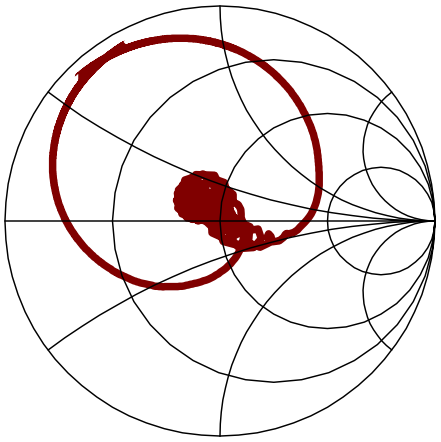


Center = 240 MHz, 18 MHz/div (112.5 kHz incr)

S11 (150-330 MHz)



S22 (150-330 MHz)



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SPECIFICATION

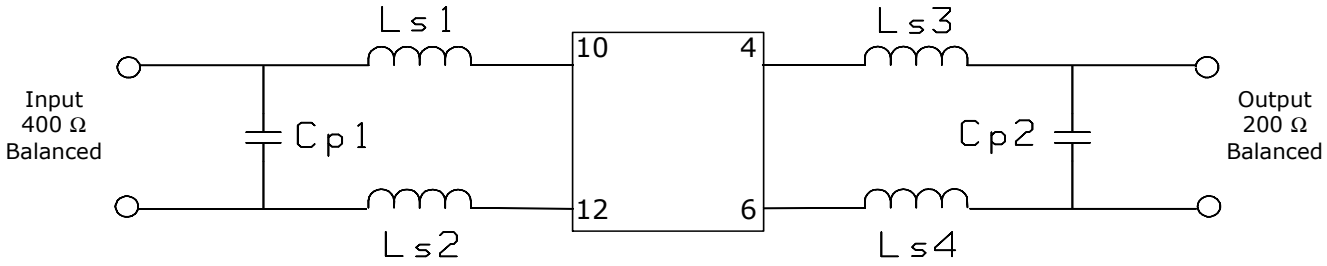
Parameter	Min	Typ	Max	Units
Center Frequency, F_C	-	240	-	MHz
Insertion Loss (Fc+/-6.3 MHz)	-	9.7	12	dB
Amplitude Ripple (Fc+/-6.3 MHz)	-	0.8	1.4	dB p-p
Rejection (150 to 220 MHz) [2]	40	44	-	dB
Rejection (257 to 262 MHz) [2]	35	40	-	dB
Rejection (262 to 330 MHz) [2]	40	44	-	dB
Phase Linearity [1]	-	7	15	deg p-p
Group Delay Ripple [1]	-	105	130	ns p-p
Device Delay	-	0.79	1	us
Triple Transit Suppression	-	30	-	dB
Input and Output Return Loss [1,3,4]	10	12	-	dB
Source and Load Impedance (Balanced)		400/200		Ω
Ambient Temperature	-	25	-	°C

Notes:
1. Defined over the passband frequency range Fc+/-7 MHz (i.e. 233 to 247 MHz).
2. Rejection levels (dB) are referenced to the insertion loss.
3. When matched using external components in SMI test fixture.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	°C
Operating Temperature Range	-40	80	°C
Input Power Level	-	15	dBm

MATCHING CIRCUIT



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Ls1 = 22 nH, Ls2 = 22 nH, Cp1 = 10 pF
Ls3 = 15 nH, Ls4 = 15 nH, Cp2 = 15 pF

Notes:

1. Recommend use of ±2% tolerance inductors, Q=40, and ±1% tolerance capacitors.
2. Component values are for reference only and may change depending on board layout.

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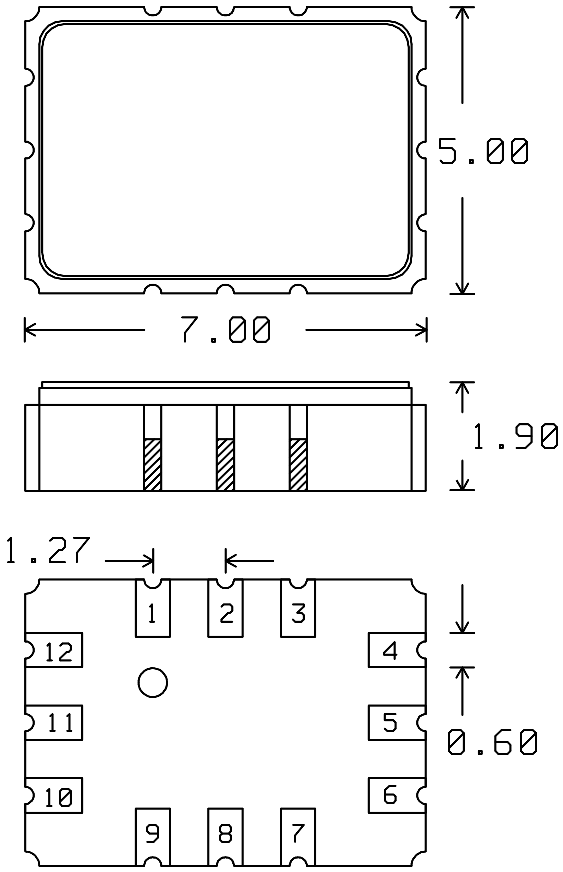
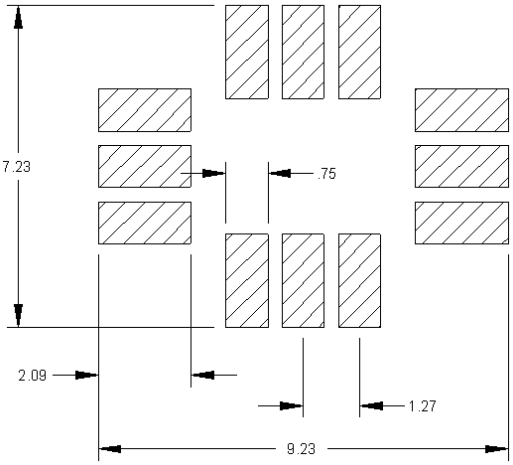
PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Units: mm

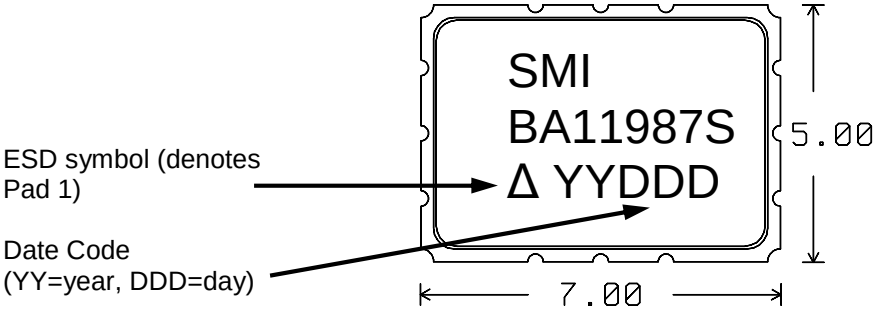
Tolerances are ±0.15 mm except for the overall length and width, which are nominal values.

Pad Configuration:

Input:	10
Input return:	12
Output:	4
Output return:	6
Ground:	All other pads

Package Material:
Body: Al_2O_3 ceramic
Lid: *Kovar, Ni* plated
Terminations: *Au* plating 1 µm min, over a 1.3-8.9 µm *Ni* plating

MARKING



ISO 9001 Registered

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