api technologies corp.

SF0122BA03286S

SAW Filter

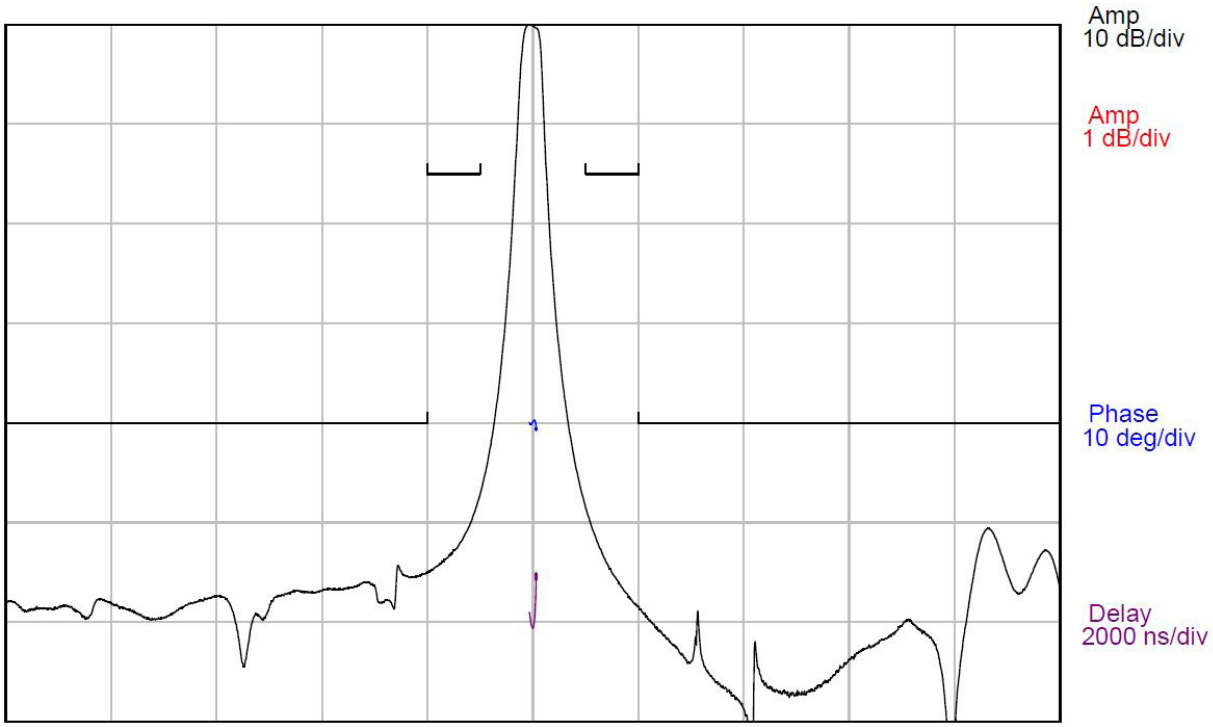
121.5 MHz SAW Bandpass Filter, 25 kHz Bandwidth



- **7 x 5 mm Ceramic LCC, 10 Pads**
- **RoHS Compliant**

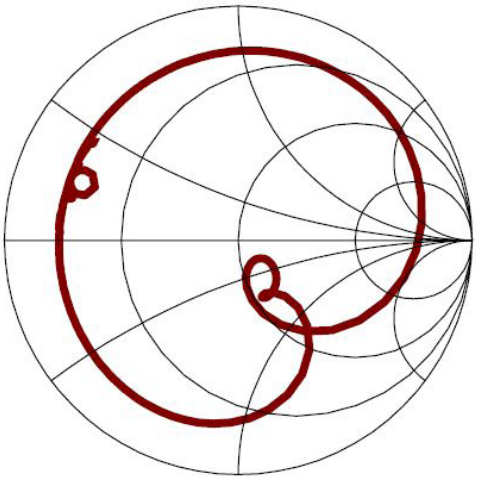
These filters are manufactured on quartz, which provides optimal temperature performance and are available from 80 -1600 MHz. This TCRF is designed for narrowband IF filtering such as in satellite transponders, directional finders and anti-jam modems. Other packaging styles are available for more rugged environments and applications. Standard part numbers as well as custom solutions are available. Please contact sales for more information.

TYPICAL PERFORMANCE

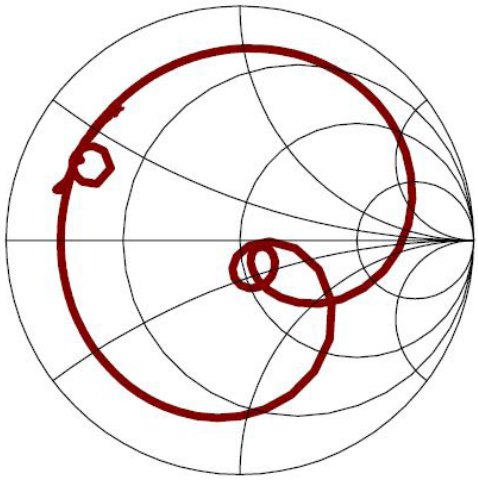


Center = 121.5 MHz, 0.4 MHz/div (2.5 kHz incr)

S_{11} (119.5-123.5 MHz)



S_{22} (119.5-123.5 MHz)



SPECIFICATION

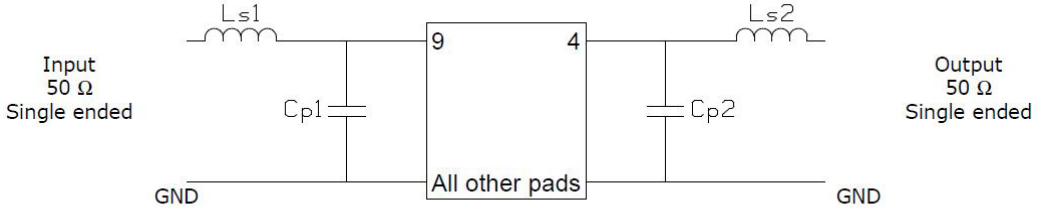
Parameter	Min	Typ	Max	Units
Center Frequency, (Fc) [1]	-	121.5	-	MHz
Minimum Insertion Loss	-	2.8	3.5	dB
1 dB Bandwidth [2]	25	57	-	kHz
Lower 1 dB Frequency	-	121.468	121.487	MHz
Upper 1 dB Frequency	121.513	121.526	-	MHz
Lower 15 dB Frequency [2]	121.3	121.44	-	MHz
Upper 15 dB Frequency [2]	-	121.55	121.7	MHz
Lower 40 dB Frequency [2]	121.1	121.35	-	MHz
Upper 40 dB Frequency [2]	-	121.63	121.9	MHz
Amplitude Ripple (Fc +/- 13 kHz)	-	0.5	1	dB p-p
Relative Attenuation (121.1 - 121.3 MHz) [2]	15	47	-	dB
Relative Attenuation (121.7 - 121.9 MHz) [2]	15	48	-	dB
Relative Attenuation (119.5 - 121.1 MHz) [2]	40	53	-	dB
Relative Attenuation (121.9 - 123.5 MHz) [2]	40	50	-	dB
Attenuation at Fc ± 1.5 MHz [2]	40	48	-	dB
Attenuation at Fc ± 4.5 MHz [2]	40	48	-	dB
Source and Load Impedance		50		ohms
Ambient Temperature		25		°C

Notes: 1. Reference frequency. Computed as mean of the 3 dB frequencies.
2. All dB values are referenced to the insertion loss value.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-55	85	°C
Operating Temperature Range	-55	85	°C
Input Power Level	-	+25	dBm

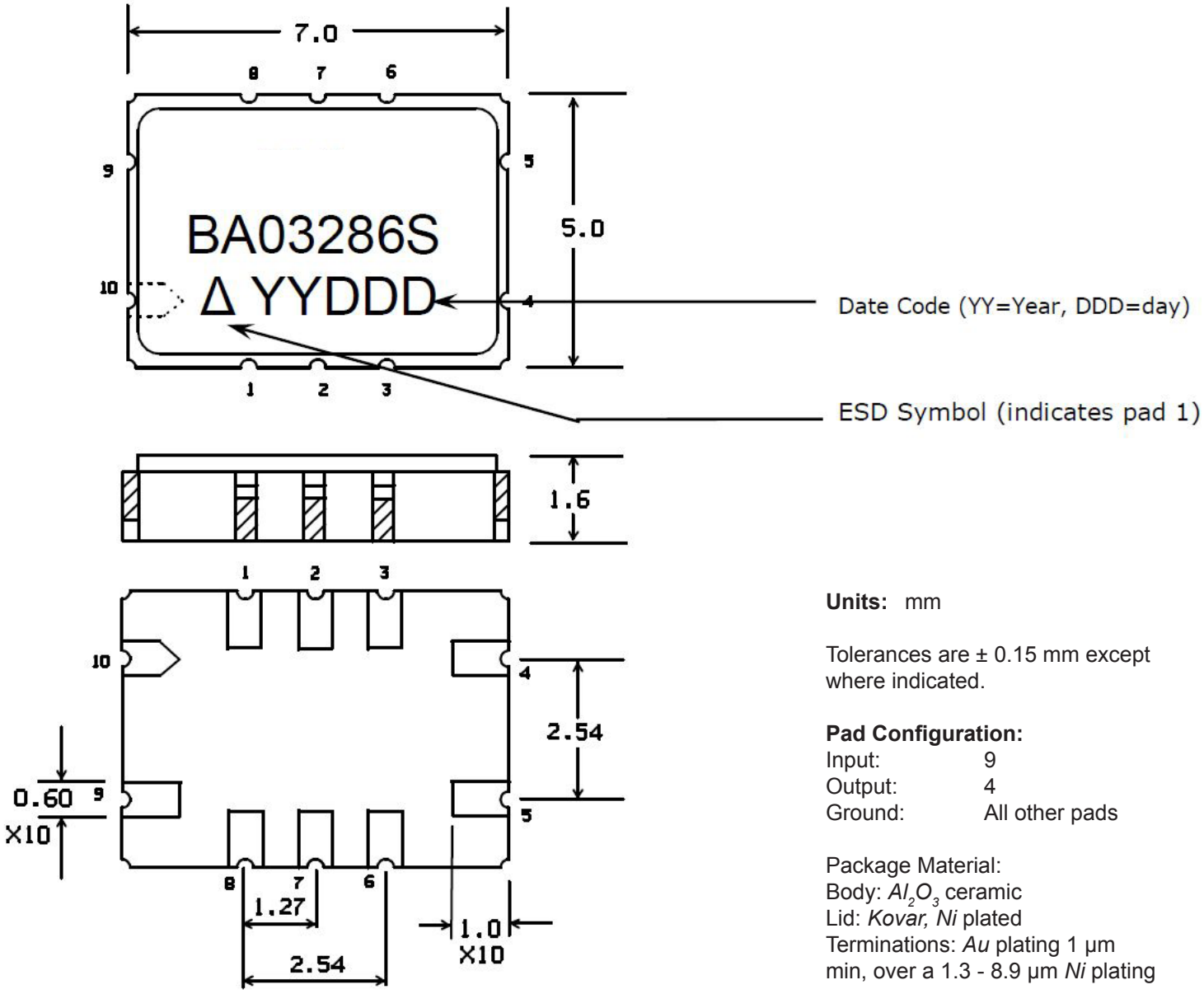
MATCHING CIRCUIT



Cp1=2 pF, Ls1=330 nH, Cp2=2 pF, Ls2=330 nH

Notes:
- Recommend ± 2% toleranced components; typical inductor Q~20 to 40.
- Values shown are for reference only and may change depending on board layout.

PACKAGE OUTLINE



Units: mm

Tolerances are ± 0.15 mm except where indicated.

Pad Configuration:

Input:	9
Output:	4
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