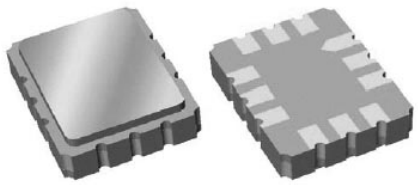
SP20401 MHz SAW Filter Electrical Characteristic

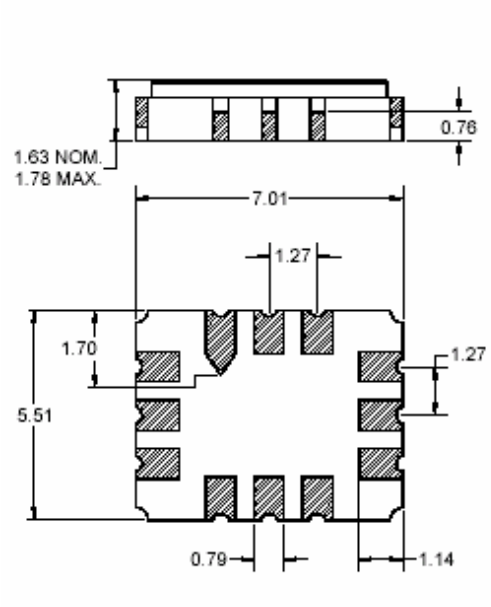
Features

- For IF applications
- Usable bandwidth of 600 KHz
- Low loss
- High attenuation
- Single-ended or Balanced operation
- Ceramic Surface Mount Package (SMP)
- Small size



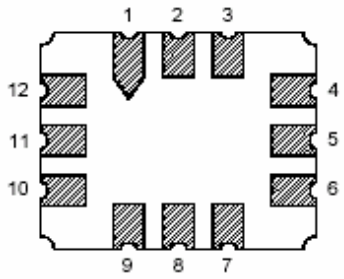
Package

Surface Mount 7.01 x 5.51 x 1.63 mm



Pin Configuration

Bottom View



Pin No.	Description
4	Output
6	Output return
10	Input
12	Input return
1,2,3,5,6	Case Ground
7,8,9,11,12	Case Ground

Dimensions shown are nominal in millimeters
All tolerances are +/-0.15mm except overall length and width +/-0.13mm

Body: Al_2O_3 eramic
Lid: *Kovar*, *Ni* plated
Terminations: *Au* plating 0.5 -1.0*u*m, over a 2 – 6*u*m *Ni* plating

Electrical Specifications (1)

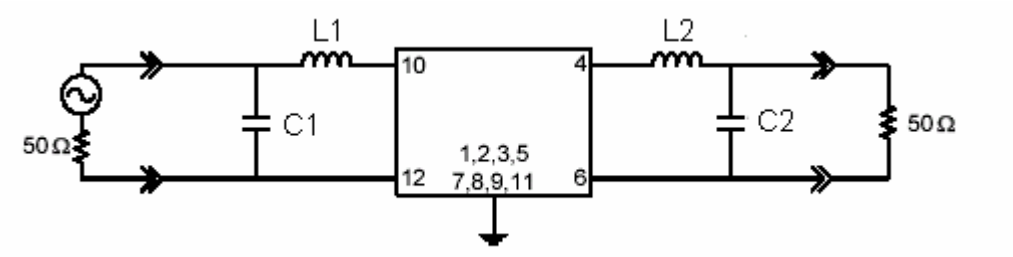
Parameter (2)	Unit	Minimum	Typical	Maximum
Center Frequency, f_0	MHz	-	204	-
Insertion Loss at 204 MHz	dB	-	9.0	10.0
1 dB Lower Frequency	MHz	-	203.56	203.70
1 dB Upper Frequency	MHz	204.3	204.43	-
Amplitude Variation				
203.7 - 204.3MHz	dB p-p	-	0.6	1
Group Delay Variation				
203.7 - 204.3MHz	nsec	-	76	200
Rejection (3)				
194 - 200 MHz	MHz	40	55.0	-
200 - 201.5 MHz	MHz	40	53.0	-
201.5 - 202 MHz	MHz	40	46.0	-
206 - 206.5 MHz	MHz	35	42.0	-
206.5 - 209 MHz	MHz	40	45.0	-
209 - 214 MHz	MHz	40	51.6	-
Operating Temperature Range (4)	^{O}C	-10 to +70 ^{O}C		

Notes:

1. All specifications are based on the test circuit shown below
2. Electrical margin has been built into the design to account for the variations due to manufacturing tolerances
3. Relative to Insertion loss at 204 MHz
4. This specification is valid for room temperature only

Matching Schematic

Actual matching values may vary due to PCB layout and parasitics



L1=L2=78nH C1=C2=36pF

Typical Performance (at +25oC)

