Features

- ✧ For IF SAW filter
- ✧ Ceramic Surface Mount Package
- ✧ Small size
- ✧ RoHS compliant (2002/95/EC), Pb-free
- ✧ Single-ended operation

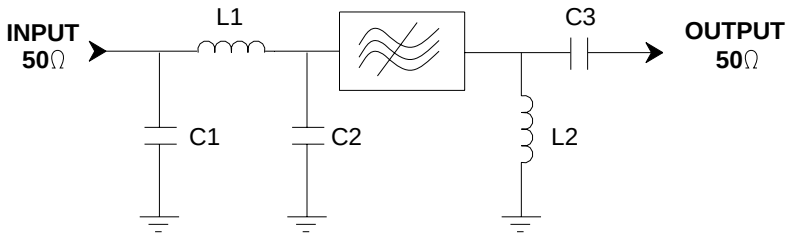
Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	165	-
Insertion Loss		dB	-	9.4	10
1 dB Bandwidth		MHz	20	21.42	-
Passband Variation(f0±10MHz)		dB	-	0.7	1.2
Group Delay Variation(f0±10MHz)		nsec	-	50	80
Absolute Delay		usec	-	0.34	0.4
Input/Output return loss		-	5	7.2/6.2	-
Ultimate Rejection	*10～110MHz*	dB	35	37	-
	127～149MHz	dB	10	18	-
	190～450MHz	dB	33	36	-
Material Temperature coefficient		KHz/°C	-15.51		
Substrate Material		-	YZ LN		
Ambient Temperature		°C	25		
Operating Temperature Range		°C	-40	-	+85
Storage Temperature Range		°C	-45	-	+105
DC Voltage		V	0		
Input Power		dBm	-	-	25
ESD Class		-	1A		
Package Size		SMD3.8*3.8			

Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

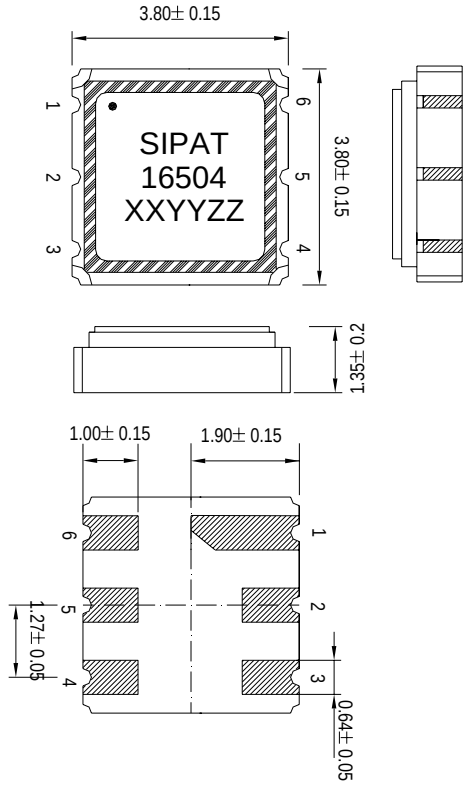
Matching Configuration



L1=150nH L2=68nH
C1=15pF C2=1pF C3=6.8pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input 2
Output 5
Ground All Others

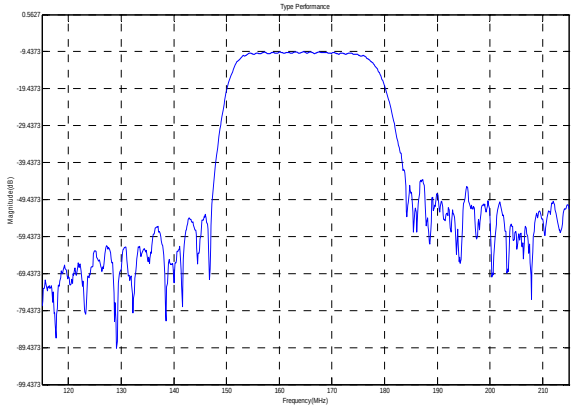
Marking Configuration:

1) •: Pad Number 1 Index
2) SIPAT: Manufacturer Name
3) 16504: Part Number
4) XXYY: Batch No.(Year/Month)
5) ZZ: Identifying Code

Package: SMD3.8*3.8 **Unit: mm**

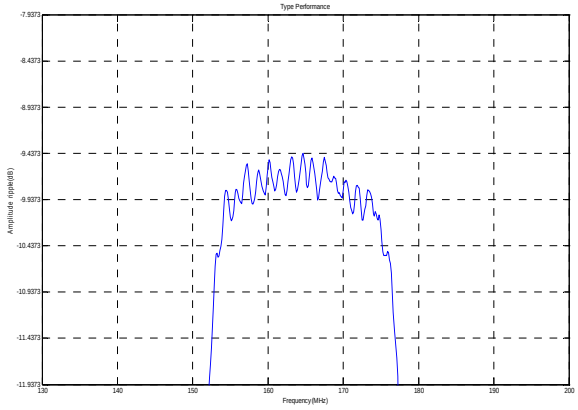
Typical Performance

Frequency Respond



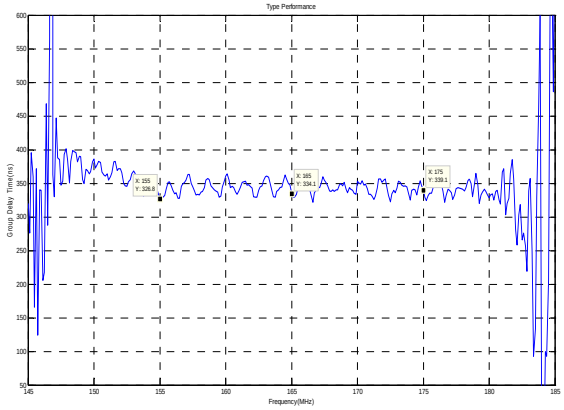
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



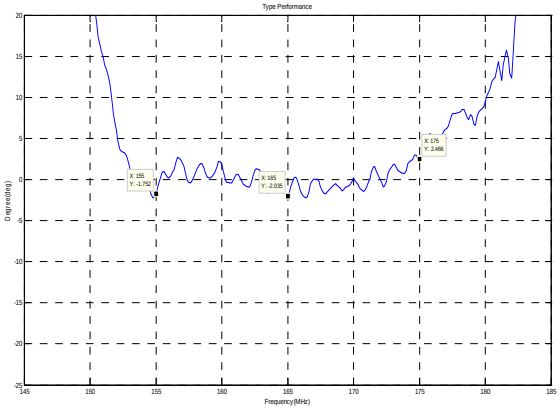
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±10MHz)



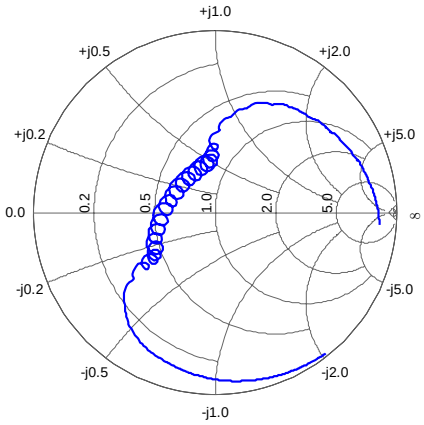
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±10MHz)



Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22

