



Features


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

Specifications

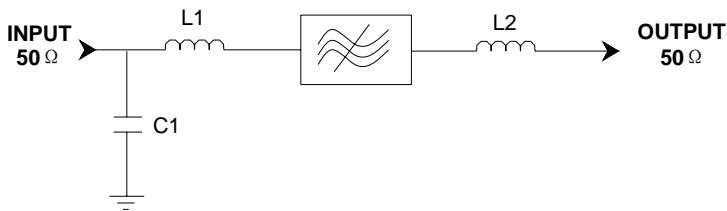
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	165	-
Insertion Loss	dB	-	7.5	9
1 dB Bandwidth	MHz	20	24.23	-
Passband Variation	dB	-	0.7	1.2
Group Delay Variation($f_0 \pm 10\text{MHz}$)	nsec	-	25	80
Absolute Delay	usec	-	0.28	0.4
Ultimate Rejection	10~110MHz	dB	35	43
	127~149MHz	dB	10	14
	190~450MHz	dB	33	35
Material Temperature coefficient	KHz/°C	-13.53		
Substrate Material	-	128LN		
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.

	SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBN16504	
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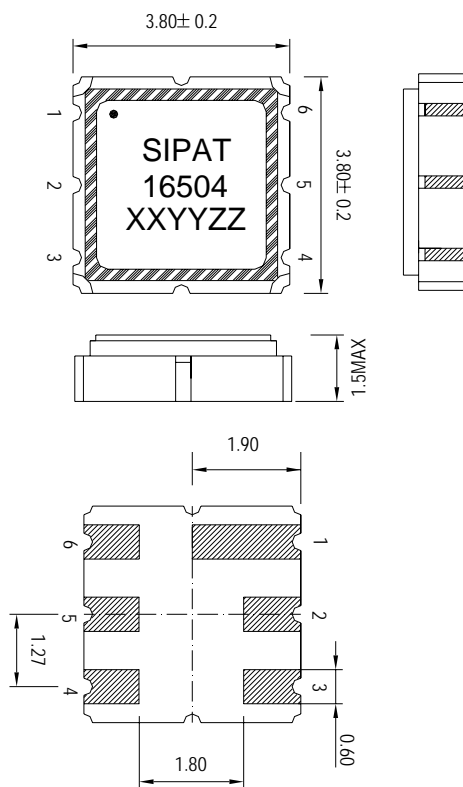
Matching Configuration



L1=L2=150nH
C1=12pF
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



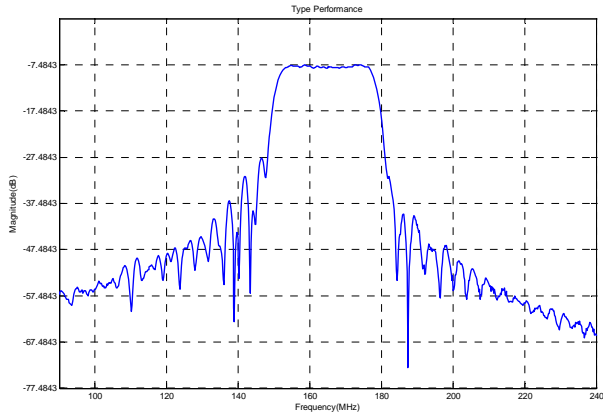
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(CETC No.26 Research Institute)
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Chongqing, China, 400060

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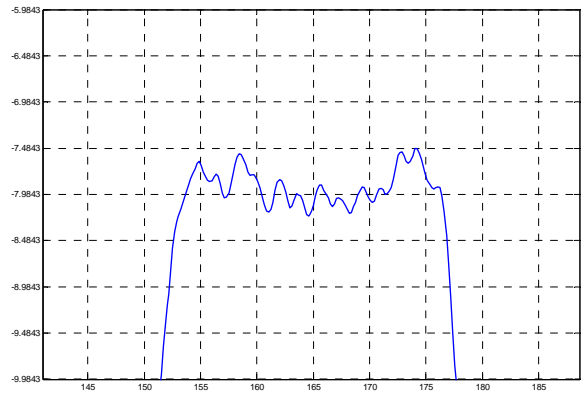
Typical Performance

Frequency Respond



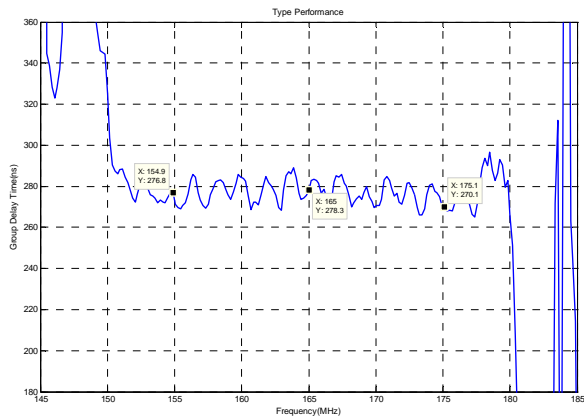
Horizontal: 20MHz/Div Vertical: 10dB/Div

Passband Respond



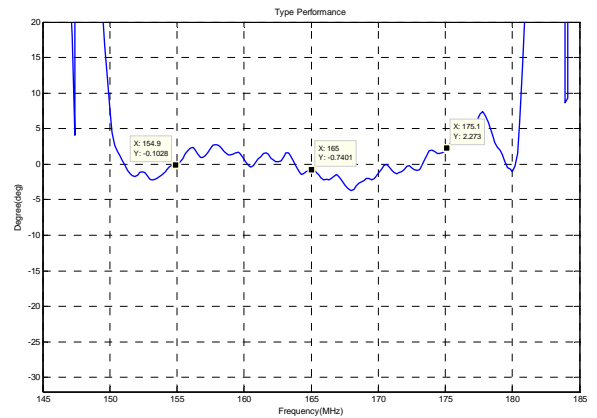
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 10\text{MHz}$)



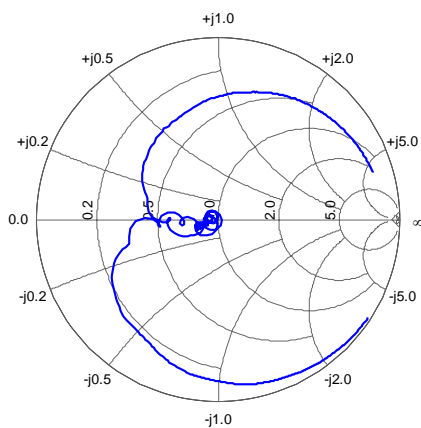
Horizontal: 5MHz/Div Vertical: 20ns/Div

Phase Linearity($f_0 \pm 10\text{MHz}$)

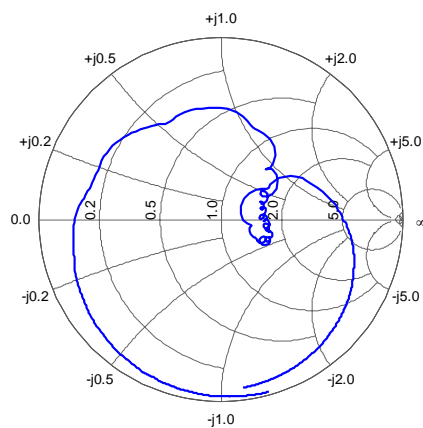


Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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