



Features


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

Specifications

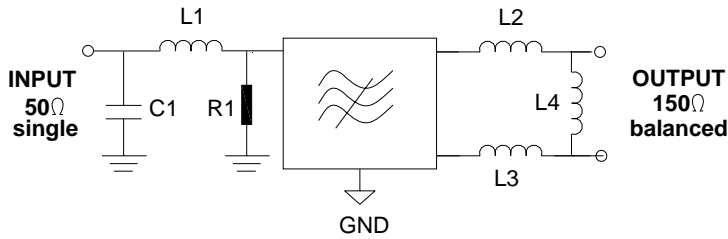
Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	-	192	-	
Insertion Loss	dB	-	9.4	10	
1 dB Bandwidth	MHz	40	40.78	-	
Group Delay Variation($f_0 \pm 20\text{MHz}$)	nsec	-	20	80	
Input/Output VSWR($f_0 \pm 20\text{MHz}$)	-	-	2/2.05	2.1	
Passband Variation($f_0 \pm 20\text{MHz}$)	dB	-	0.6	1	
Absolute Delay	usec	-	0.24	0.9	
Ultimate Rejection	10~152MHz	dB	37	39	-
	152~162MHz	dB	20	29	-
	222~232MHz	dB	20	28	-
	232~1000MHz	dB	40	43	-
Material Temperature coefficient	KHz/°C	-15.7			
Substrate Material	-	128LN			
Ambient Temperature	°C	25			
DC Voltage	V	0			
Input Power	dBm	-	-	10	
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 3 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	LBN19203	
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Matching Configuration



L1=129nH L4=82nH

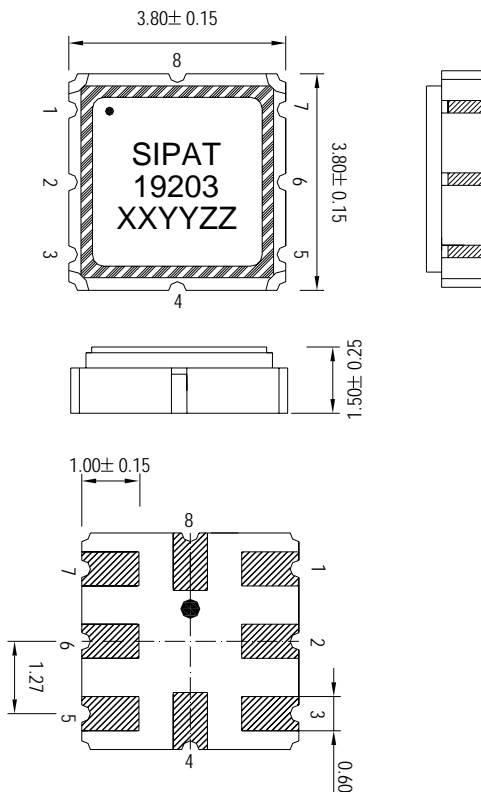
L3=L2=33nH

C1=12pF R1=2000Ω

Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input: 1

Output: 5,6

Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) 19203: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD3.8*3.8

Unit: mm



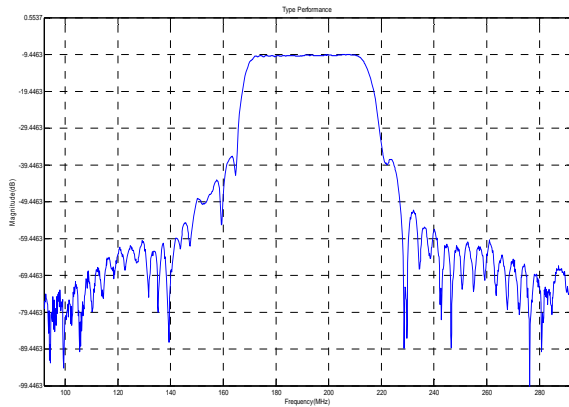
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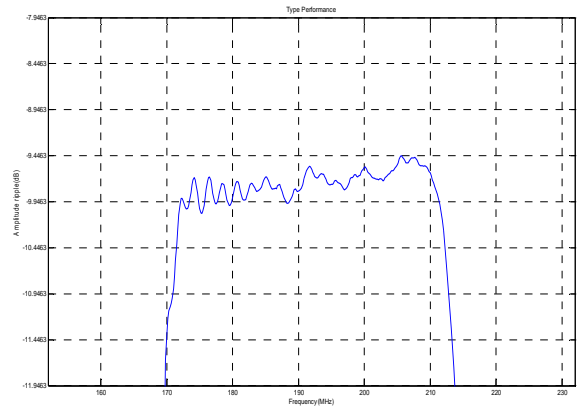
Typical Performance

Frequency Response



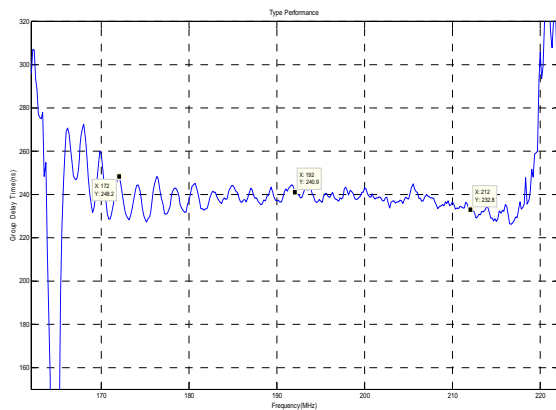
Horizontal: 20MHz/Div Vertical: 10dB/Div

Passband Response



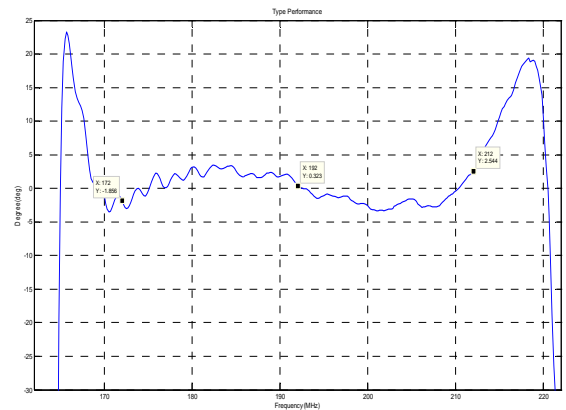
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Group Delay Variation(f0±20MHz)



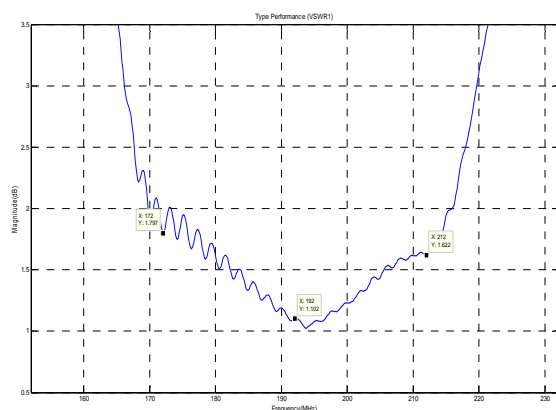
Horizontal: 10MHz/Div Vertical: 20ns/Div

Phase Linearity(f0±20MHz)

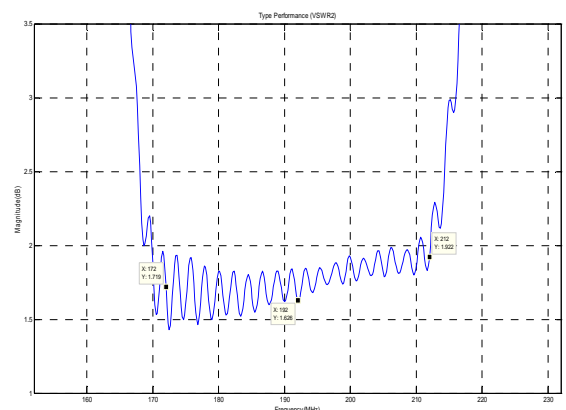


Horizontal: 10MHz/Div Vertical: 5deg/Div

VSWR11(f0±20MHz)



VSWR22(f0±20MHz)



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