



Features


- ◇ For IF SAW filter
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	138.1	138.24	138.4
Insertion Loss	dB	-	25.4	28
1.2 dB Bandwidth	MHz	24.6	24.91	-
3 dB Bandwidth	MHz	25.2	25.51	-
35 dB Bandwidth	MHz	-	27.72	28.2
Passband Variation	dB	-	0.8	1.2
Phase Linearity($f_0 \pm 12\text{MHz}$)	deg	-	5	8
Group Delay Variation($f_0 \pm 12\text{MHz}$)	nsec	-	23	60
Absolute Delay	usec	-	1.21	1.5
Ultimate Rejection($f_0 \pm 18\text{MHz}$)	dB	42	53	-
Material Temperature coefficient	KHz/°C	-11.34		
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	-	-	10
ESD Class	-	1A		
Package Size	SMD13.3*6.5			

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	LBN13811	
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Matching Configuration

INPUT
50 Ω

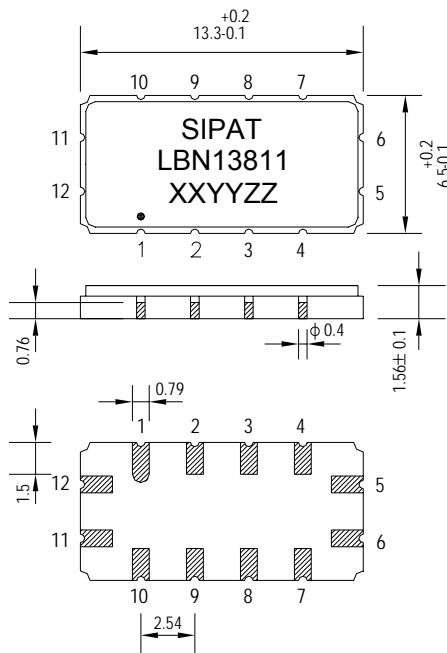


OUTPUT
50 Ω

Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input: 11
Output: 5
Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBN13811: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3*6.5

Unit: mm



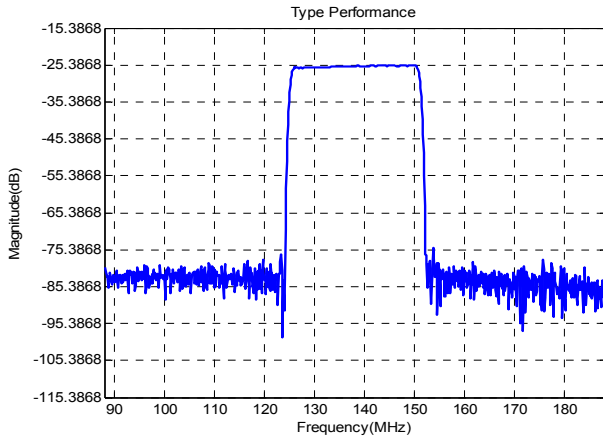
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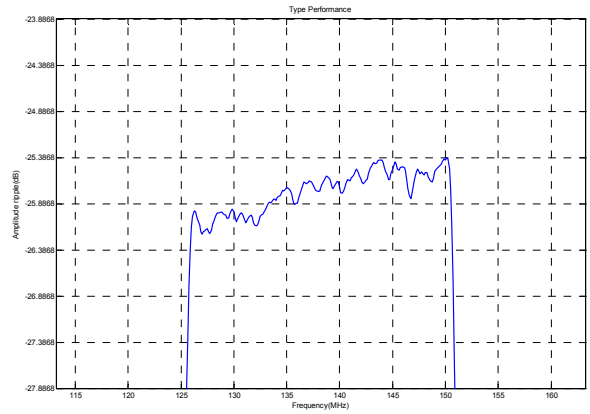
Typical Performance

Frequency Respond



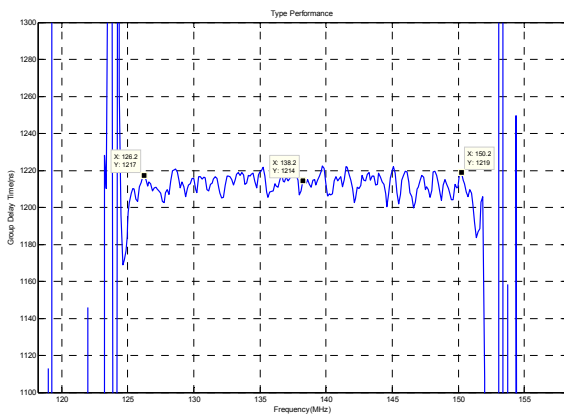
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



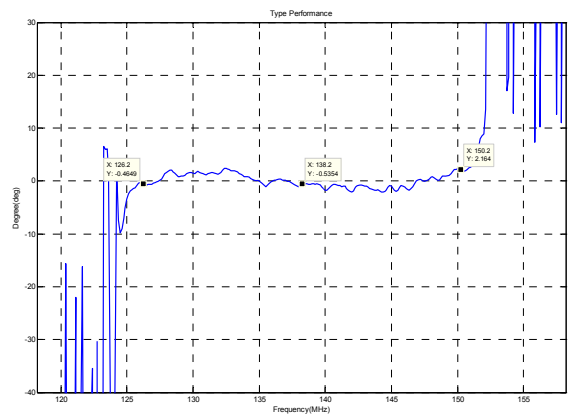
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 12\text{MHz}$)



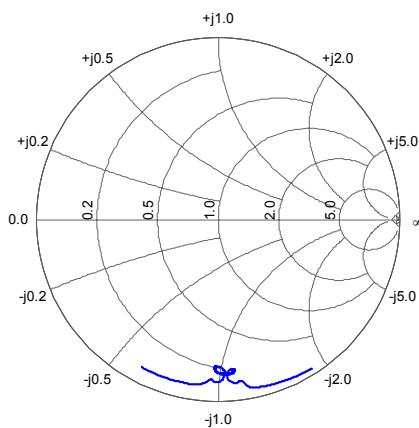
Horizontal: 5MHz/Div Vertical: 20ns/Div

Phase Linearity($f_0 \pm 12\text{MHz}$)

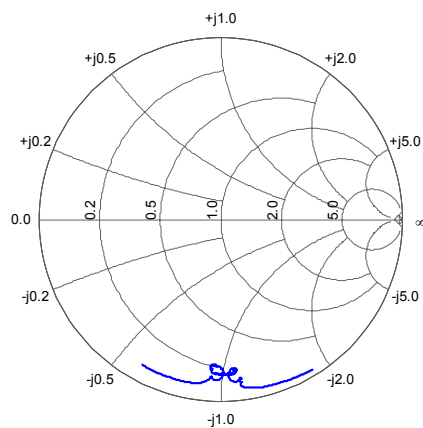


Horizontal: 5MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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