



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Dual In-line Package
- ✧ No matching required for operation at 50Ω
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	89.85	90	90.15
Insertion Loss		dB	-	30.3	33
1 dB Bandwidth		MHz	20	20.15	-
3 dB Bandwidth		MHz	-	20.34	-
40 dB Bandwidth		MHz	-	21.05	-
Passband Variation		dB	-	0.5	1
Absolute Delay		usec	-	3.5	4
Ultimate Rejection	$f_0\pm 10.6\text{MHz}$	dB	43	50	-
	$f_0\pm 11\text{MHz}$	dB	50	54	-
	$f_0\pm 15\text{MHz}$	dB	50	53	-
Material Temperature coefficient		KHz/°C	-8.5		
Substrate Material		-	YZ LN		
Ambient Temperature		°C	25		
Operating Temperature Range		°C	-40	-	+85
DC Voltage		V	0		
Input Power		dBm	-	-	10
ESD Class		-	1A		
Package Size		DIP3512 (35.0x12.8x4.7mm3)			

Notes:

- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
- 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	LBN09029	
		Rev. Date	2010-05-24	
		Ver.	1.0	Page 1/3

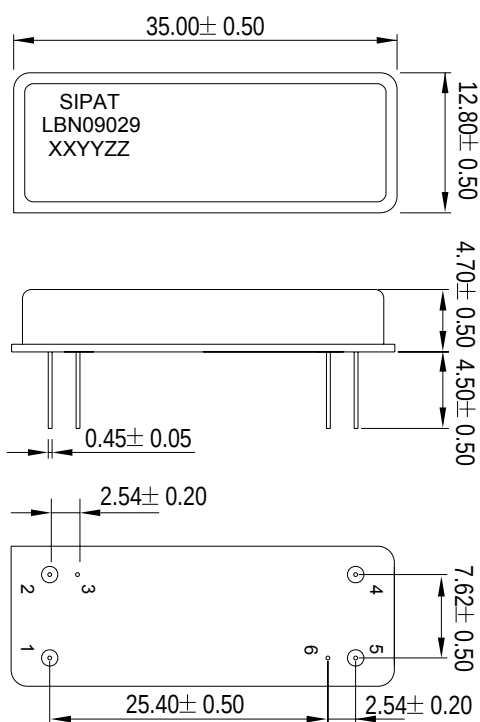
Matching Configuration



Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 1
Output 5
Ground All Others

Marking Configuration:

- 1) SIPAT: Manufacturer Name
- 2) LBN09029: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



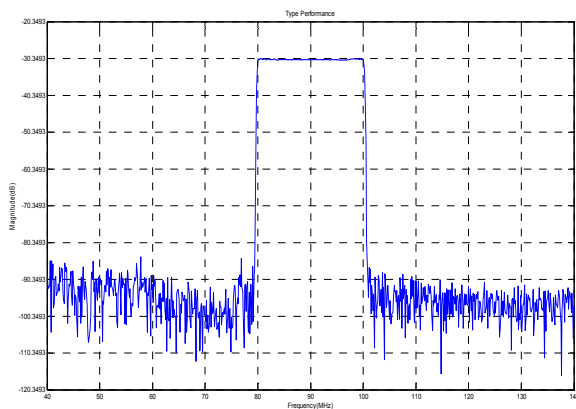
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Typical Performance

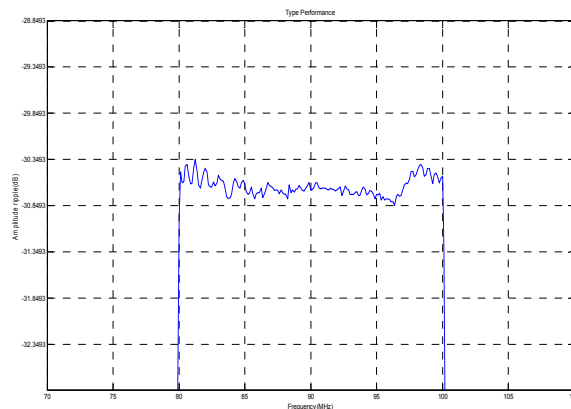
Frequency Response



Horizontal: 10MHz/Div

Vertical: 10dB/Div

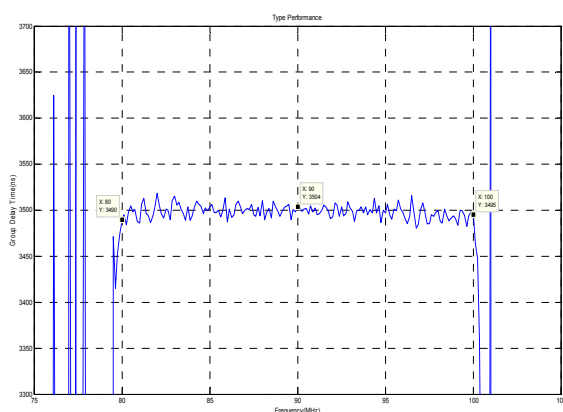
Passband Response



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

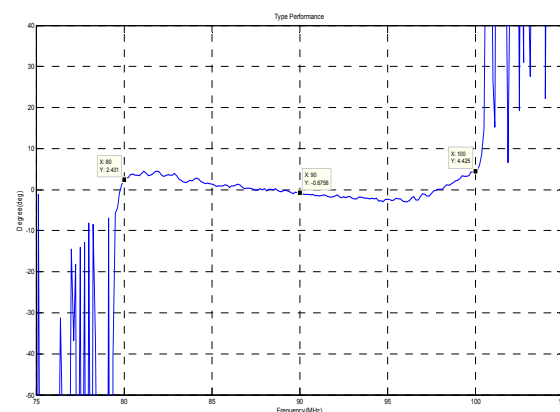
Group Delay Variation($f_0 \pm 10\text{MHz}$)



Horizontal: 5MHz/Div

Vertical: 50ns/Div

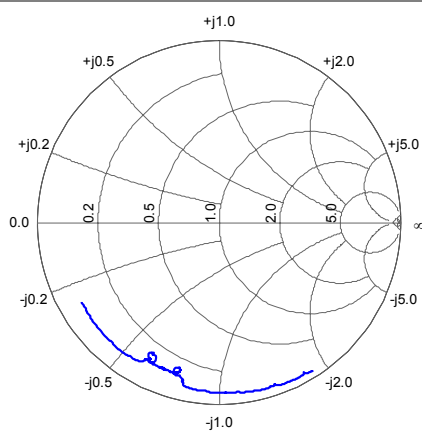
Phase Linearity($f_0 \pm 10\text{MHz}$)



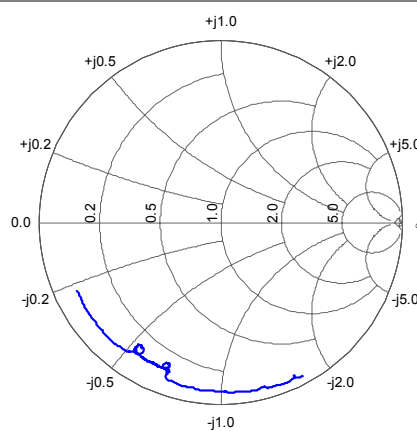
Horizontal: 5MHz/Div

Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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