



Features


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

Specifications

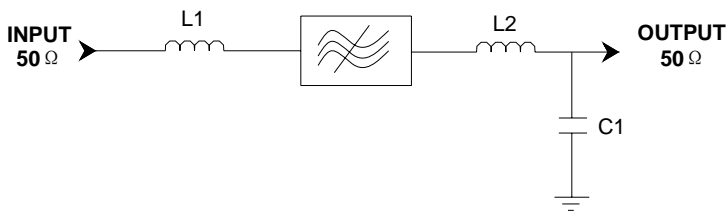
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.8	70	70.2
Insertion Loss	dB	-	25.5	26
1 dB Bandwidth	MHz	19	20.69	21
3 dB Bandwidth	MHz	23.5	23.87	24.5
30 dB Bandwidth	MHz	-	32.85	33
Passband Variation($f_0 \pm 9.5\text{MHz}$)	dB	-	0.8	1
Group Delay Variation($f_0 \pm 9.5\text{MHz}$)	nsec	-	40	50
Absolute Delay	usec	-	1.05	-
Ultimate Rejection	dB	40	51	-
Material Temperature coefficient	KHz/°C	-5.74		
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	-	1		
Package Size	SMD13.3*6.5A			

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	LBN70A56	
		Rev. Date	2008-01-30	
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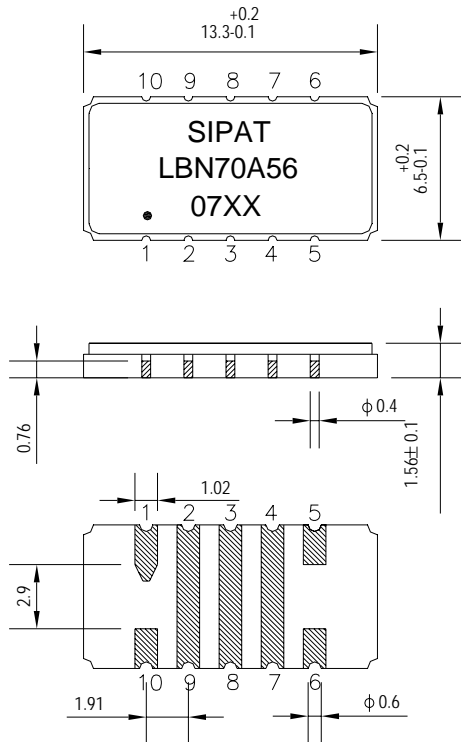
Matching Configuration



$L1 = (680 + 100)nH$ $L2 = (330 + 68)nH$
 $C1 = 18pF$
Source/Load Impedance = 50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input 10
Output 5
Ground All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBN70A56: Part Number
- 4) 07XX: Date Code

Package: SMD13.3*6.5A

Unit: mm



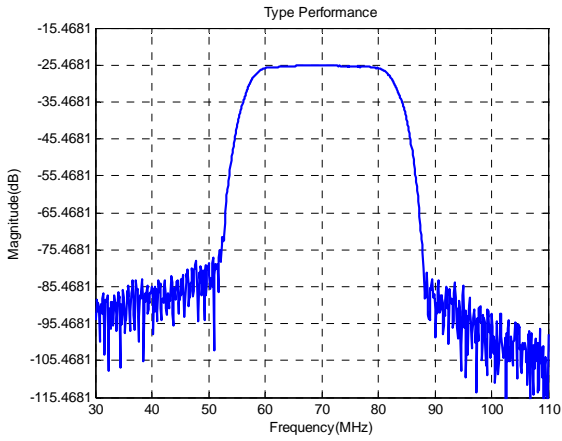
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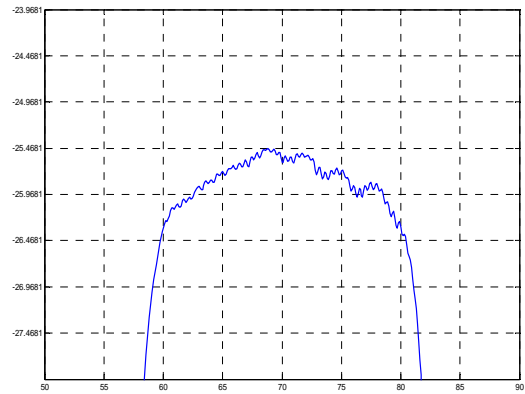
Typical Performance

Frequency Respond



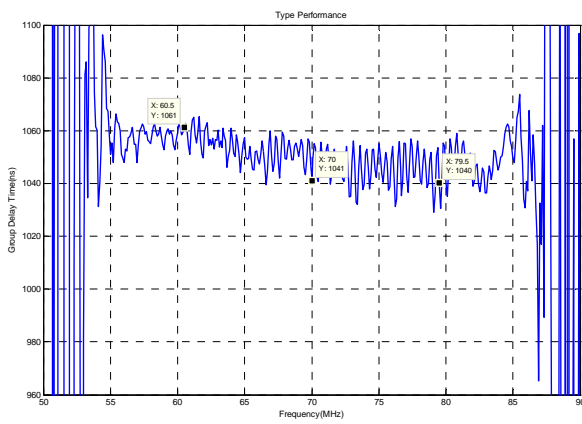
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



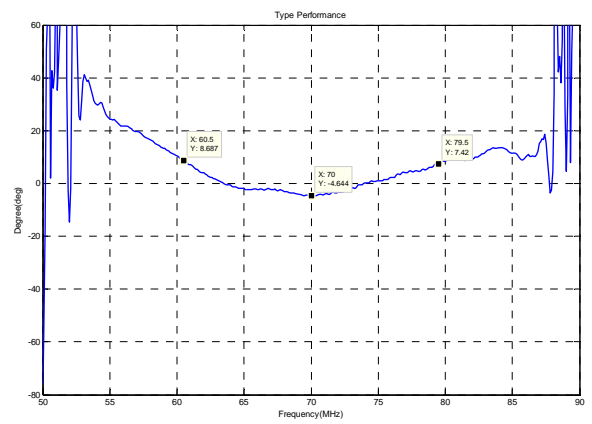
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±9.5MHz)



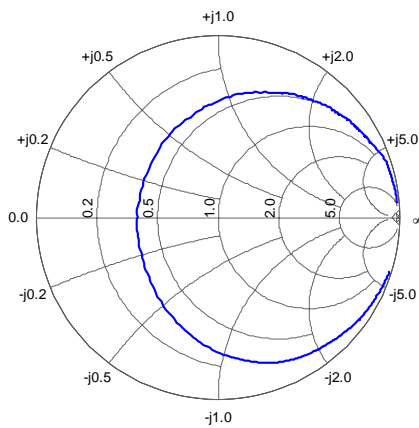
Horizontal: 5MHz/Div Vertical: 20ns/Div

Phase Linearity(f0±9.5MHz)

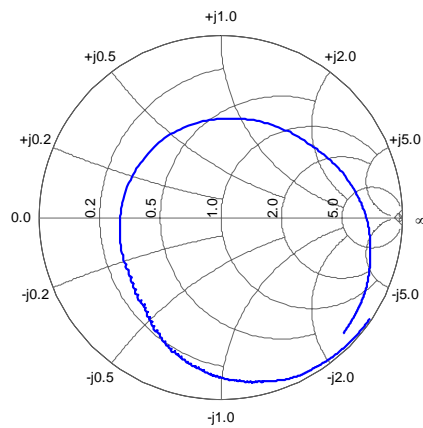


Horizontal: 5MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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