



### Features


- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ 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	69.8	70	70.2
Insertion Loss	dB	-	23.3	27
1 dB Bandwidth	MHz	9.8	10.2	10.25
3 dB Bandwidth	MHz	12.1	12.51	12.55
40 dB Bandwidth	MHz	-	20.55	22
Passband Variation( $f_0 \pm 4.9\text{MHz}$ )	dB	-	0.2	1
Group Delay variation( $f_0 \pm 4.4\text{MHz}$ )	nsec	-	15	20
Absolute Delay	usec	-	0.87	-
Ultimate Rejection	dB	40	43	-
Material Temperature coefficient	KHz/°C	-5.74		
Substrate Material	-	128 LN		
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.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBN70A45	
		Rev. Date	2007-10-19	
		Ver.	1.0	Page 1/3

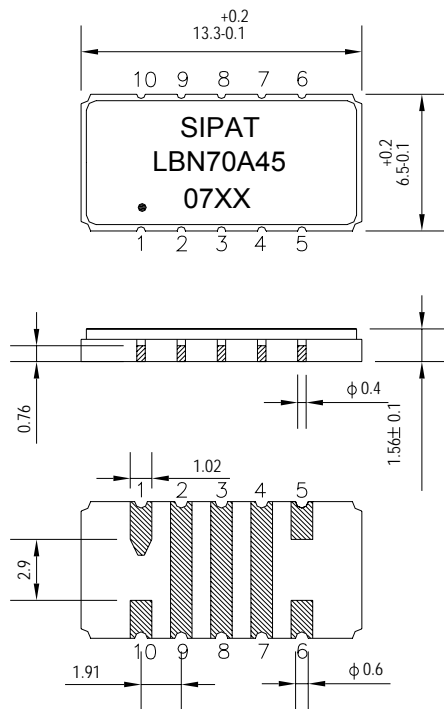
### Matching Configuration



Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

### Package Dimension



#### Pad Configuration:

Input 10  
Output 5  
Ground All Others

#### Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBN70A45: Part Number
- 4) 07XX: Date Code

Package: SMD13.3\*6.5A

Unit: mm



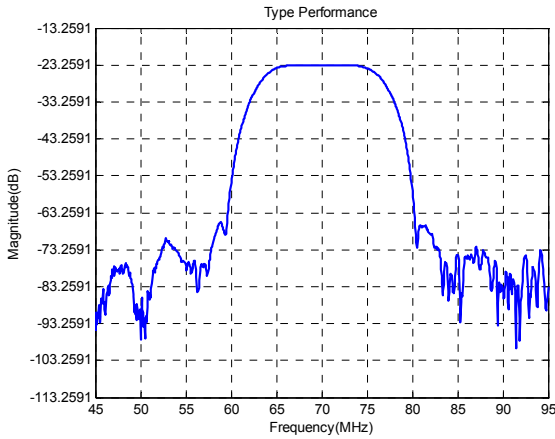
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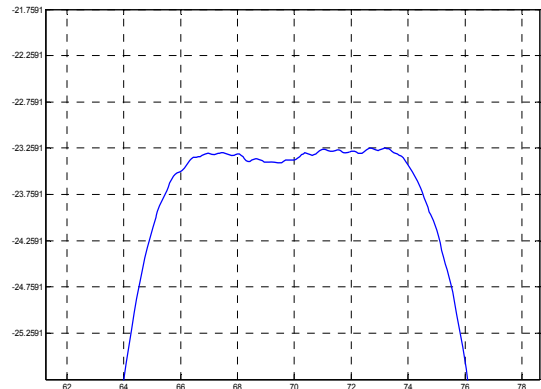
Typical Performance

Frequency Respond



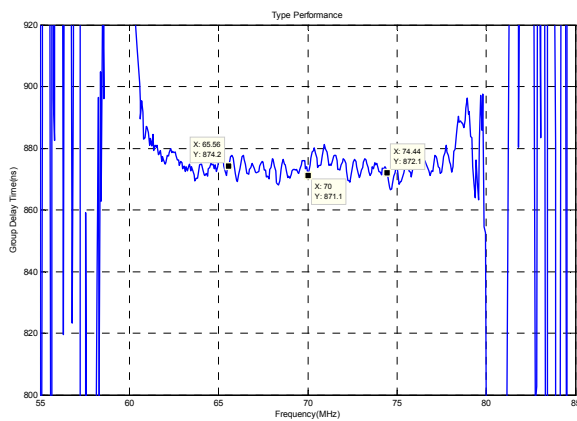
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



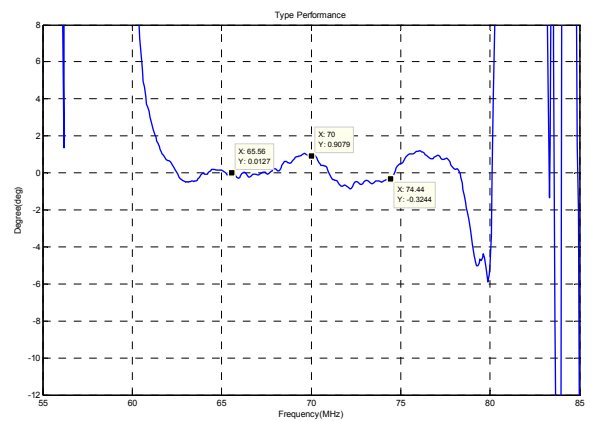
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±4.4MHz)



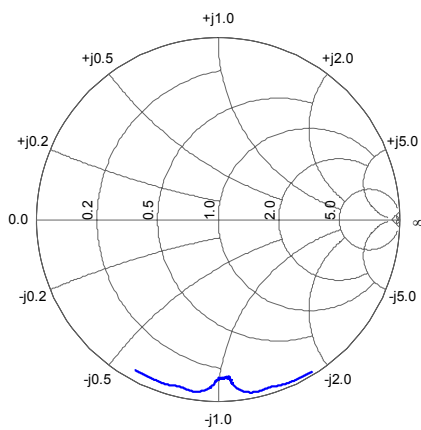
Horizontal: 5MHz/Div Vertical: 20ns/Div

Phase Linearity(f0±4.4MHz)

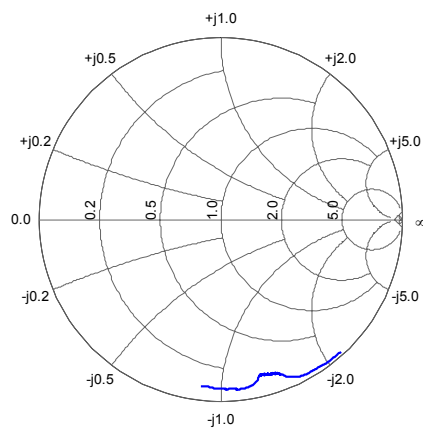


Horizontal: 5MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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