



Features

- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

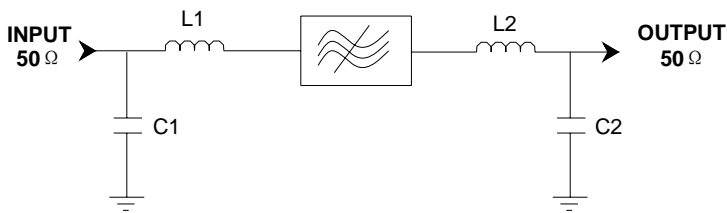
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.95	70	70.05
Insertion Loss	dB	-	22	25
1 dB Bandwidth	MHz	5.6	5.66	-
3 dB Bandwidth	MHz	6	6.18	-
40 dB Bandwidth	MHz	-	8.06	8.4
Passband Variation	dB	-	0.7	1
Phase Linearity(f0±3MHz)	Deg	-	4	7
Group Delay Variation(f0±3MHz)	nsec	-	70	130
Absolute Delay	usec	-	2.77	-
Ultimate Rejection	dB	50	58	-
Material Temperature coefficient	KHz/°C	-1.26		
Substrate Material	-	112LT		
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	DIP2212 (22.2x12.8x4.7mm3)			

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	LBT7027	
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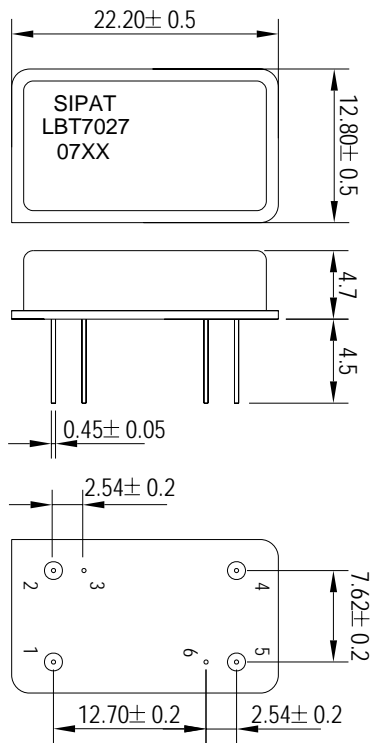
Matching Configuration



$L1 = (180 + 82)nH$ $L2 = (220 + 39)nH$
 $C1 = C2 = 56pF$
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) LBT7027: Part Number
- 3) 07XX: Date Code

Package: DIP2212

Unit: mm



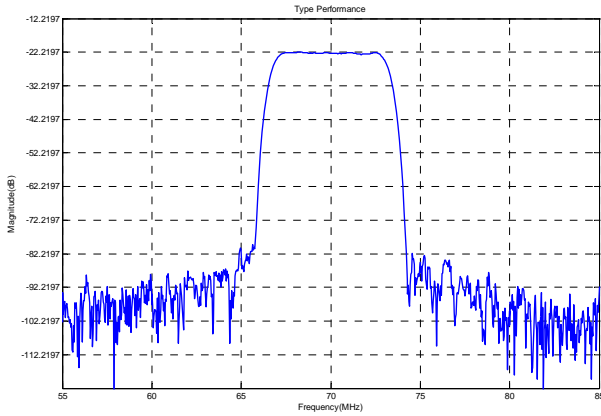
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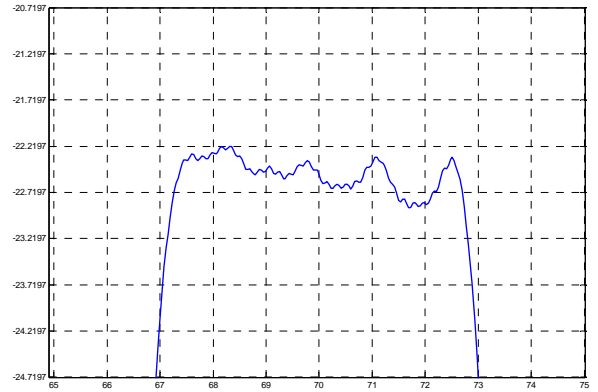
Typical Performance

Frequency Respond



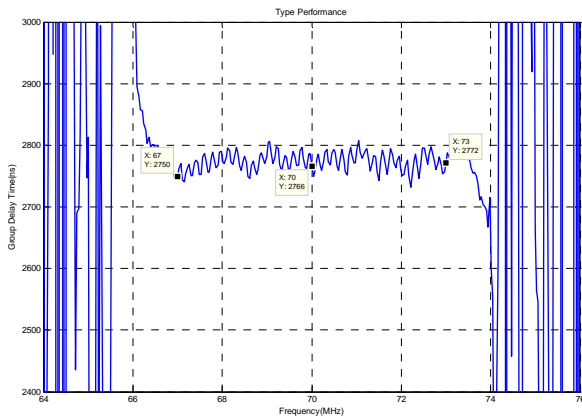
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



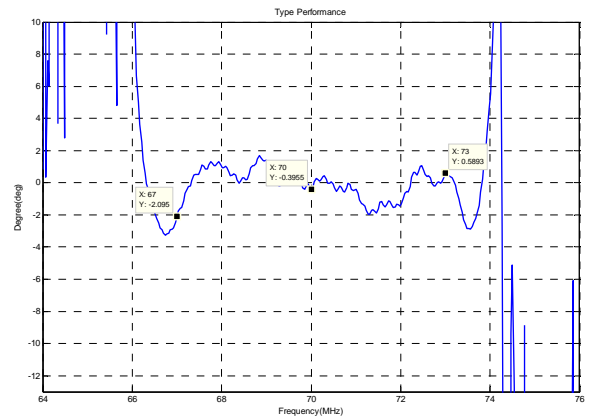
Horizontal: 1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 3\text{MHz}$)



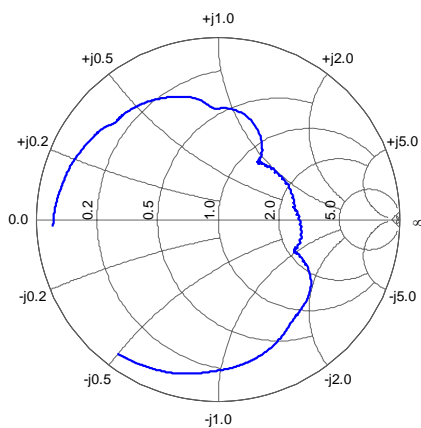
Horizontal: 2MHz/Div Vertical: 100ns/Div

Phase Linearity($f_0 \pm 3\text{MHz}$)

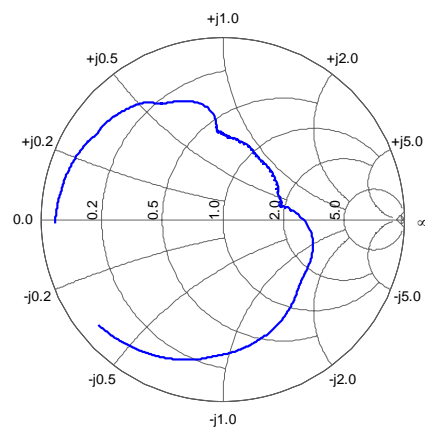


Horizontal: 2MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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