



Features

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

Specifications

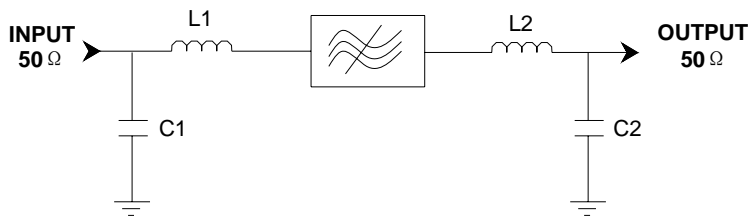
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	177	-
Insertion Loss	dB	-	6.4	8
1 dB Bandwidth	MHz	20	21.91	-
3 dB Bandwidth	MHz	21	24.79	-
Passband Variation	dB	-	0.9	1
Absolute Delay	usec	-	0.3	0.4
Group Delay variation($f_0 \pm 10\text{MHz}$)	nsec	-	35	100
Input VSWR	dB	10	12	
Output VSWR	dB	10	15	
Ultimate Rejection	10~149MHz	dB	38	-
	209~350MHz	dB	40	-
Material Temperature coefficient	KHz/°C	-14.51		
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	SMD3.8*3.8			

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	LBN17701	
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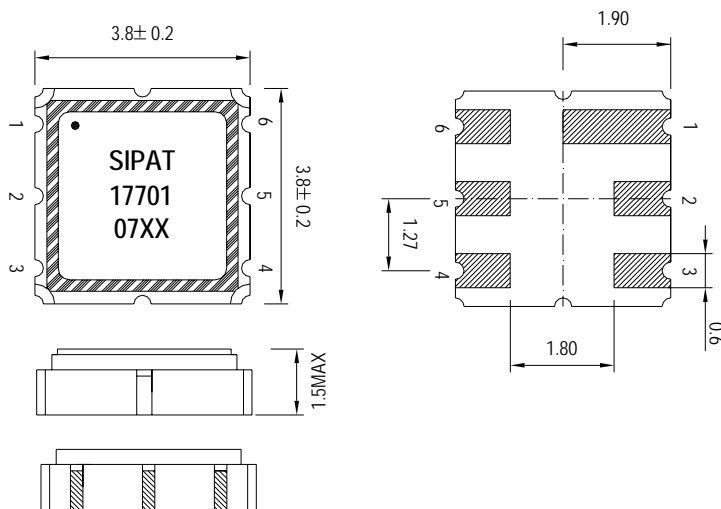
Matching Configuration



L1=120nH L2=100nH
C1=6.8pF C2=15pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 2
Output 5
Ground All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) 17701: Part Number
- 4) 07XX: Date Code

Package: SMD3.8*3.8

Unit: mm



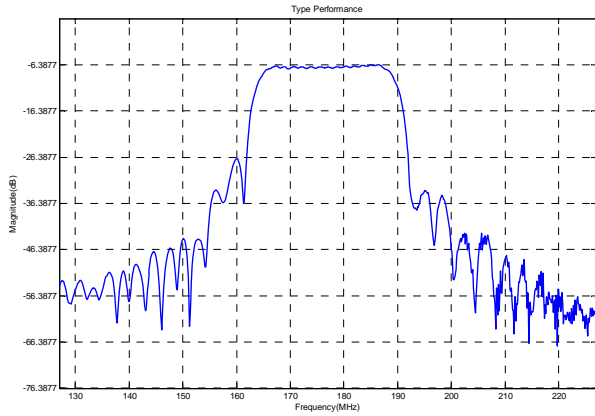
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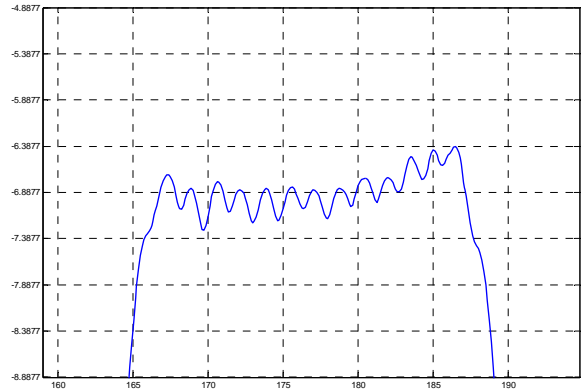
Typical Performance

Frequency Respond



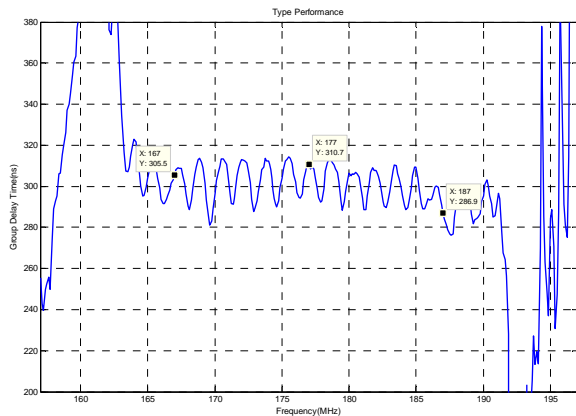
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



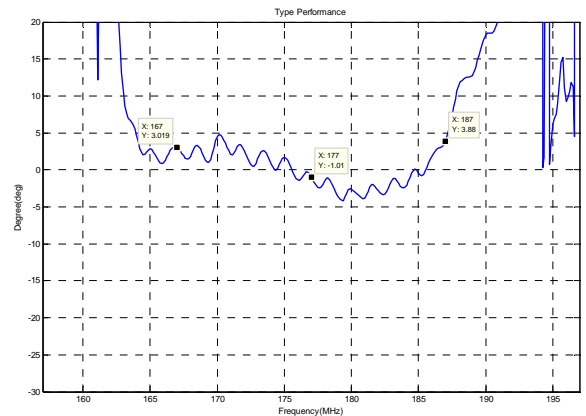
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

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



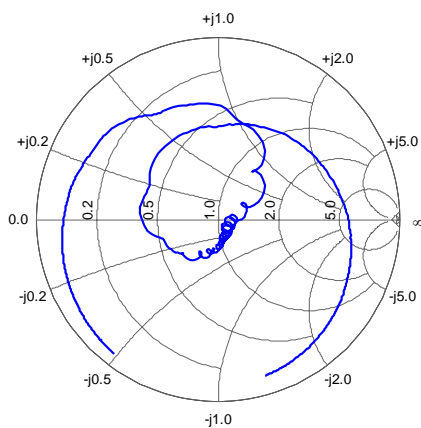
Horizontal: 5MHz/Div Vertical: 20ns/Div

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

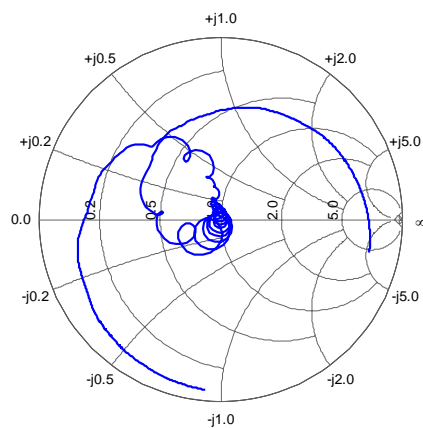


Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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