



### Features


- ◇ For RF SAW filter
- ◇ 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	-	830.05	-
Insertion Loss		dB	-	1.6	4.5
1.5 dB Bandwidth		MHz	9.1	14.43	-
Passband Variation(825.5~834.6MHz)		dB	-	0.4	1.5
Absolute Delay		usec	-	0.06	-
Input/Output VSWR(825.5~834.6MHz)		-	-	1.25/1.17	2.5
Ultimate Rejection	0~808MHz	dB	35	38	-
	808~816MHz	dB	10	38	-
	842~850MHz	dB	-	5	-
	850~858MHz	dB	30	40	-
	858~2000MHz	dB	34	38	-
Material Temperature coefficient		KHz/°C	-26.56		
Substrate Material		-	42LT		
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		-	1A		
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.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBT83002	
		Rev. Date	2008-07-29	
		Ver.	1.0	Page

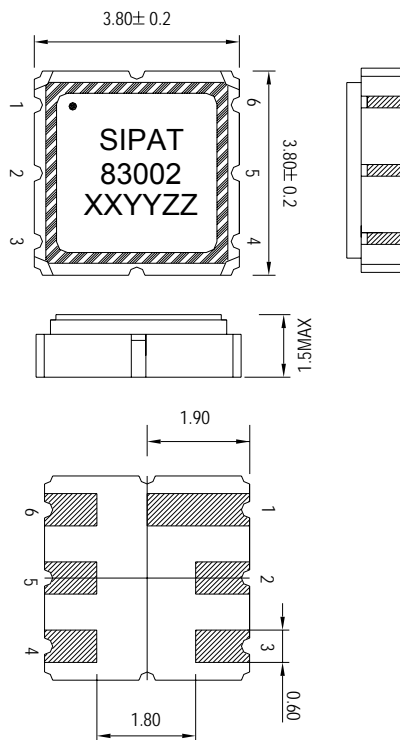
### Matching Configuration



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) 83002: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD3.8\*3.8

Unit: mm



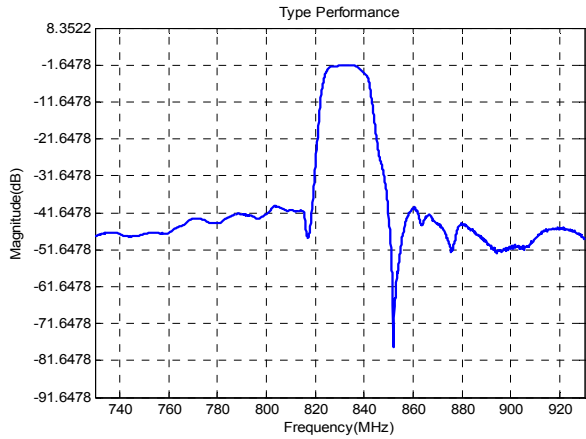
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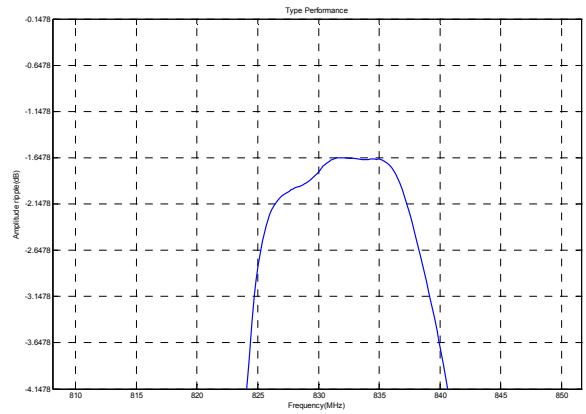
Typical Performance

Frequency Respond



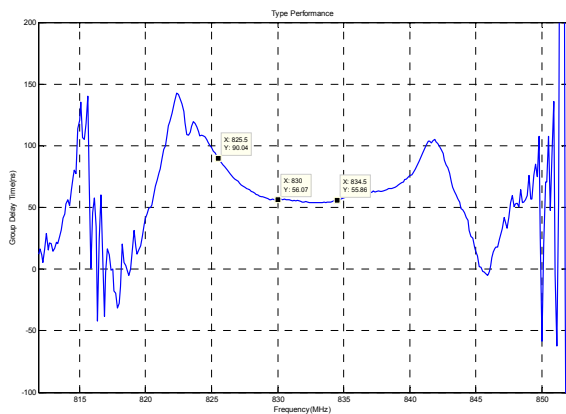
Horizontal: 20MHz/Div Vertical: 10dB/Div

Passband Respond



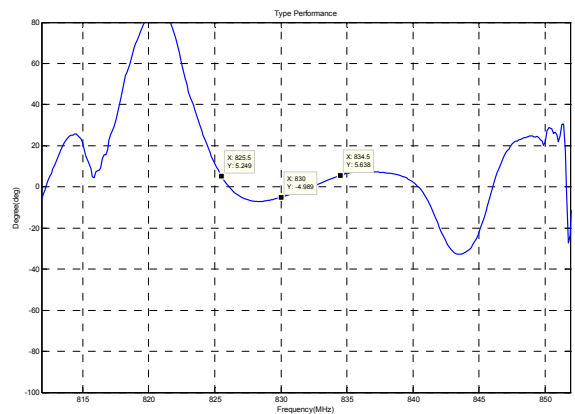
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±4.5MHz)



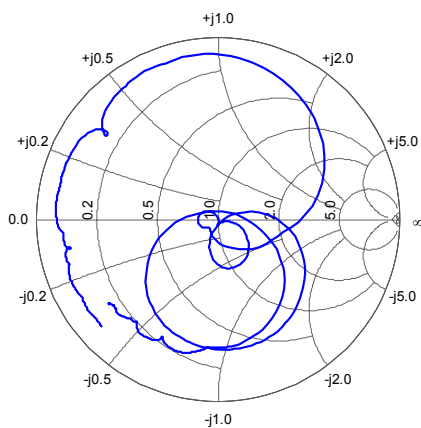
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±4.5MHz)

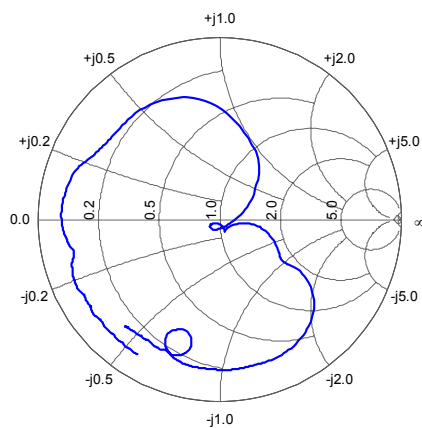


Horizontal: 5MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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