



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.

	SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBT83002	
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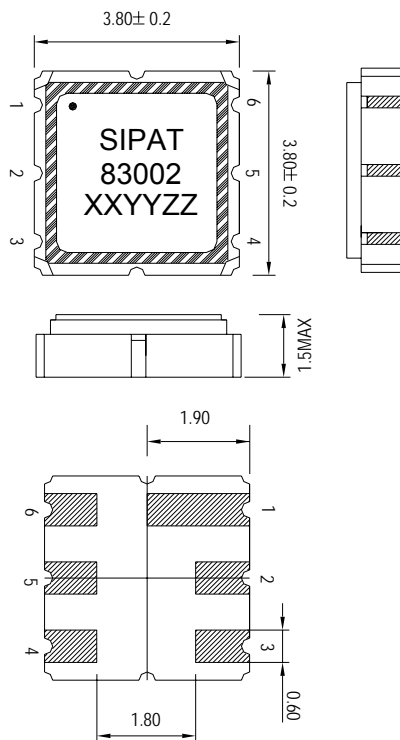
Matching Configuration



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

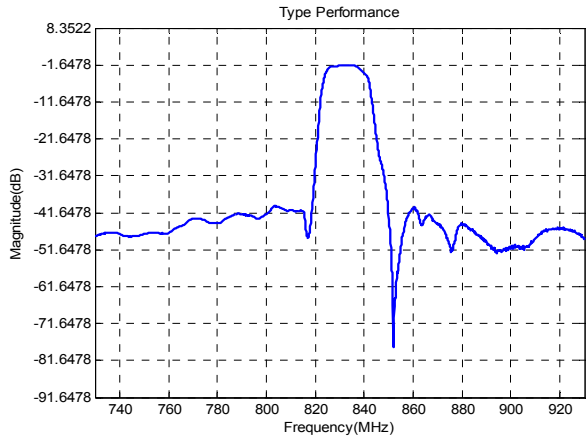


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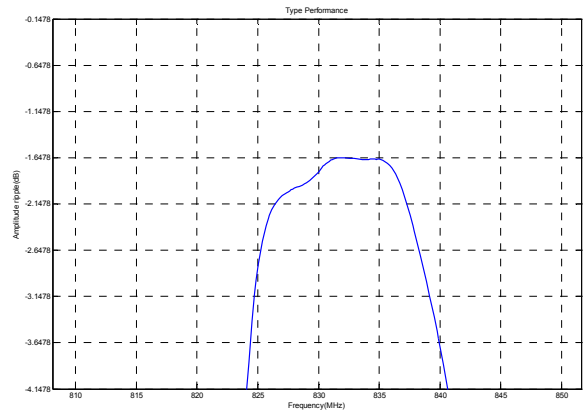
Typical Performance

Frequency Respond



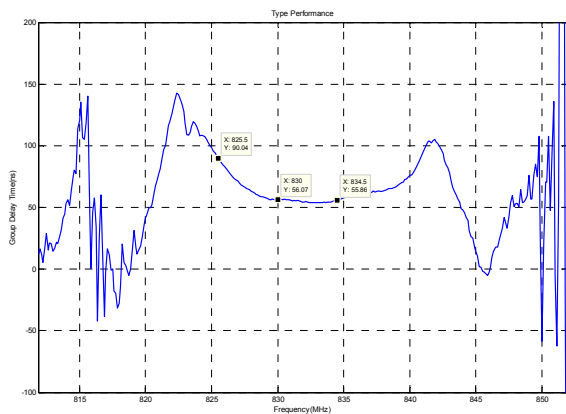
Horizontal: 20MHz/Div Vertical: 10dB/Div

Passband Respond



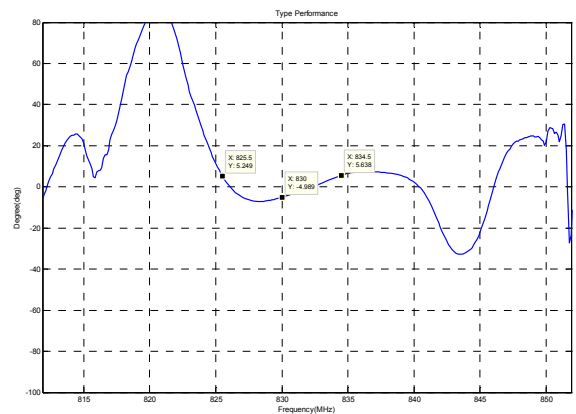
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±4.5MHz)



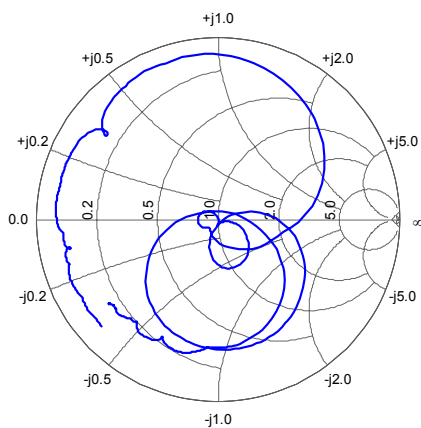
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±4.5MHz)

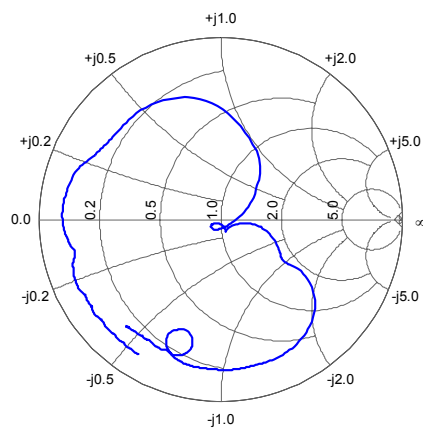


Horizontal: 5MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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