

Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	650	-
Insertion Loss		dB	-	1.8	3
1 dB Bandwidth		MHz	-	32.76	-
3 dB Bandwidth		MHz	45	44.19	-
35 dB Bandwidth		MHz	-	110.35	55
Passband Variation(f0±20MHz)		dB	-	0.5	1
Absolute Delay		usec	-	0.03	-
Group Delay Variation(f0±20MHz)		nsec	-	30	20
Ultimate Rejection	540 ~620MHz	dB	8	20	-
	680 ~760MHz	dB	8	18	-
	1 ~540MHz	dB	35	51	
	760 ~1000MHz	dB	35	52	-
Material Temperature coefficient		KHz/°C	-44.2		
Ambient Temperature		°C	25		
Package Size		SMD3.8*3.8			

Notes:

1. All specifications are based on the test circuit shown
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over 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

Matching Configuration

INPUT
50 Ω



OUTPUT
50 Ω

Source /Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.



SIPAT Co., Ltd.
(CETC No. 26 Research Institute)
Nanping Huayuan Road No. 14
Chongqing, China, 400060

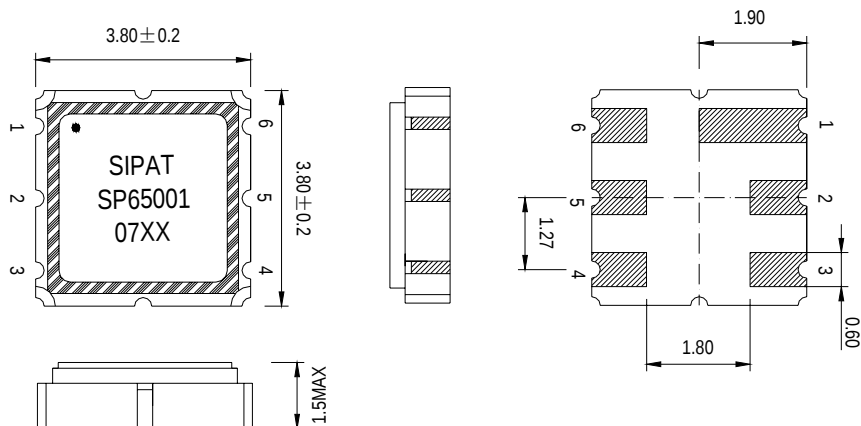
Part Number SP65001

Rev. Date 2007-04-26

Ver. 1.0

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Package Dimension



- 1) ∴ Pad Number 1 Index
- 2) SIPAT: Manufacturer name
- 3) SP65001: Part Number
- 4) 07XX: Date Code

Input	2
Output	5
Ground	1,3,4,6

Package: SMD3.8*3.8

Unit: mm

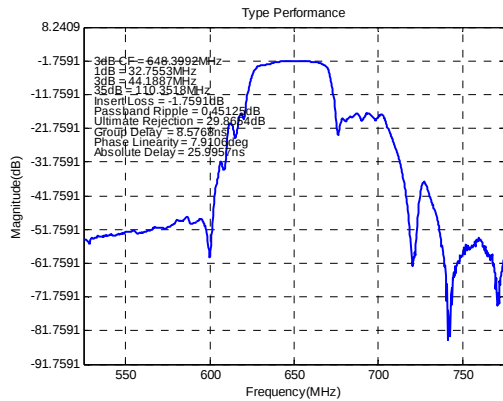


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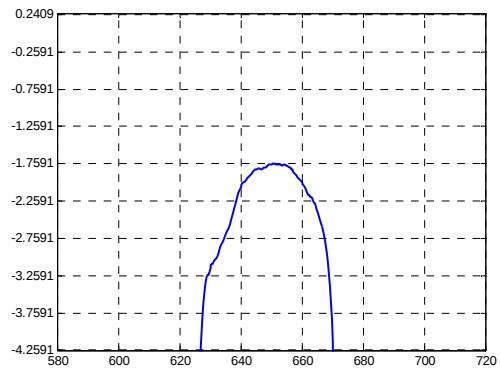
Typical Performance

Frequency Response



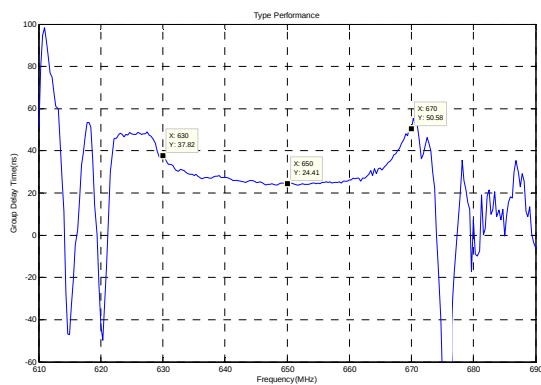
Horizontal: 50MHz/Div Vertical: 10dB/Div

Passband Response



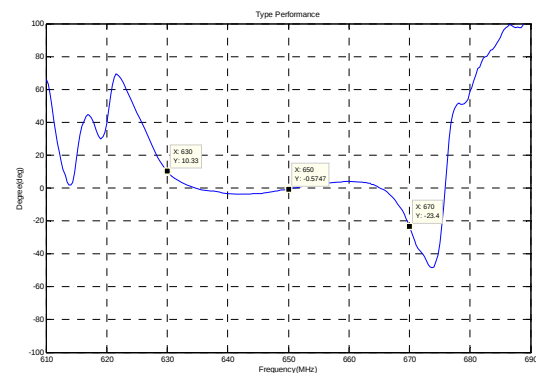
Horizontal: 20MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±20MHz)



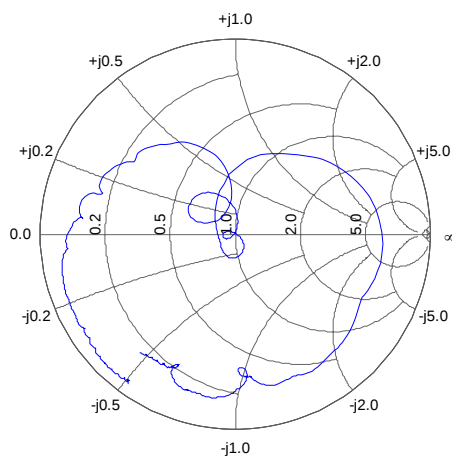
Horizontal: 10MHz/Div Vertical: 20ns/Div

Phase Linearity(f0±20MHz)

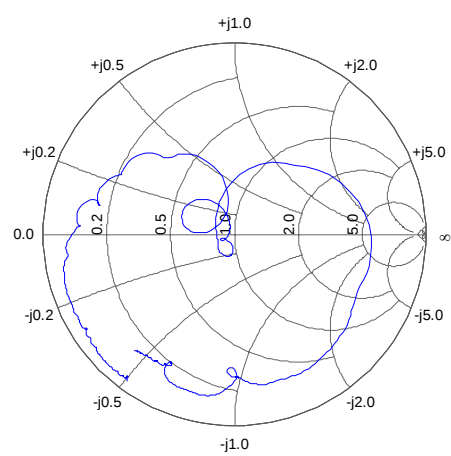


Horizontal: 10MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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Maximum Ratings

Operating Temperature Range	°C	[-40°C;+85°C]
Storage Temperature Range	°C	[-40°C;+105°C]
DC Voltage	V	0
Input Power	dBm	10 max
ESD Class		1

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