

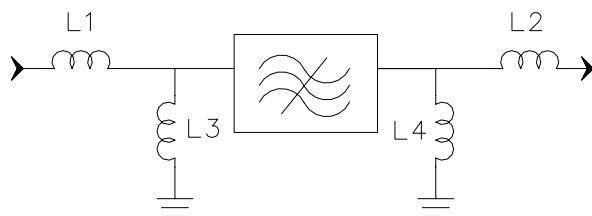
## Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.75	140	140.25
Insertion Loss	dB	-	13.5	15
1 dB Bandwidth	MHz	31	32.5	-
3 dB Bandwidth	MHz	32	33.5	-
40 dB Bandwidth	MHz	-	37.6	40
Phase Linearity( $f_0 \pm 12.9\text{MHz}$ )	deg	-	4	6
Passband Variation	dB	-	0.8	1
Group delay variation ( $f_0 \pm 12.9\text{MHz}$ )	nsec	-	70	100
Ultimate Rejection	dB	40	43	-
Absolute delay	usec	-	0.96	-
Substrate Material			YZ	
Ambient Temperature	°C		25	
Package Size	SMD1365 (13.3 x 6.5 mm Nominal Footprint )			

### Notes:

- All specifications are based on the test circuit shown
- In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- This is the optimum impedance in order to achieve the performance show

## Matching Configuration




$$L1 = 10 + j82\text{nH} \quad L2 = 82 + j18\text{nH}$$

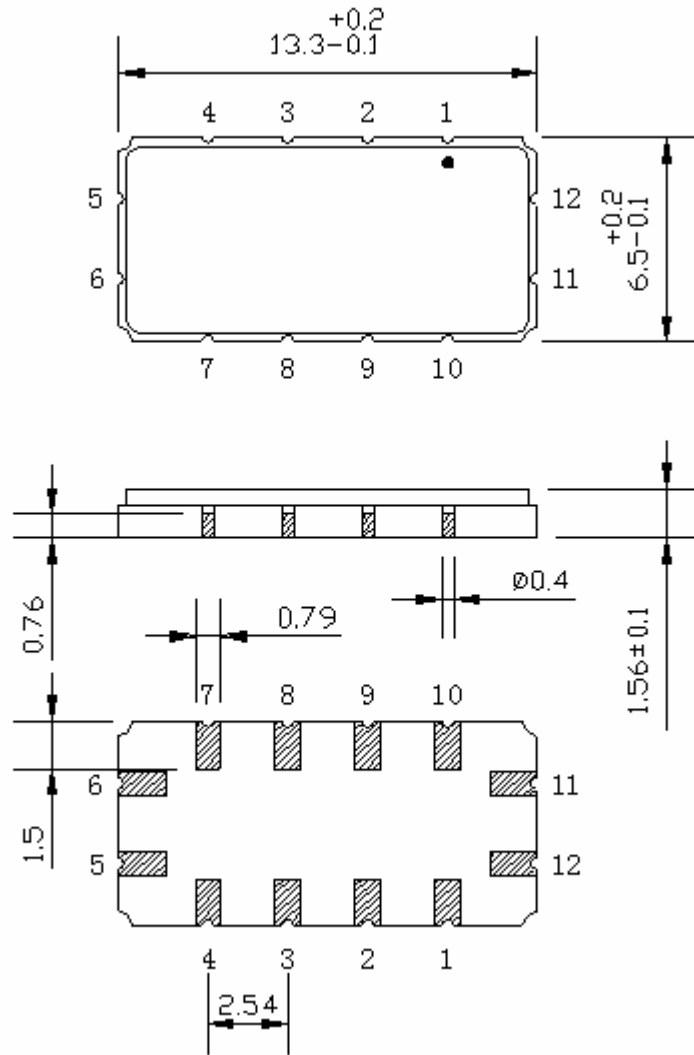
$$L3 = 180\text{nH} \quad L4 = 220\text{nH}$$

Source/Load Impedance = 50 ohm

Notes - Component values may change depending on board layout.

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Package Dimension



**Input :11**  
**Output:5**  
**Others:Grounded**

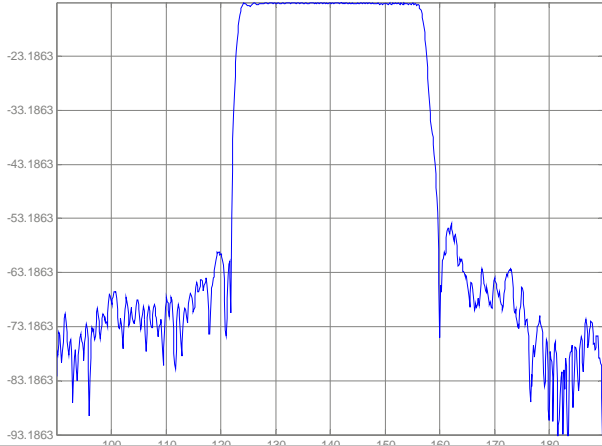


**SIPAT Co., Ltd.**  
( CETC No. 26 Research Institute )  
Nanping Huayuan Road No. 14  
Chongqing, China, 400060

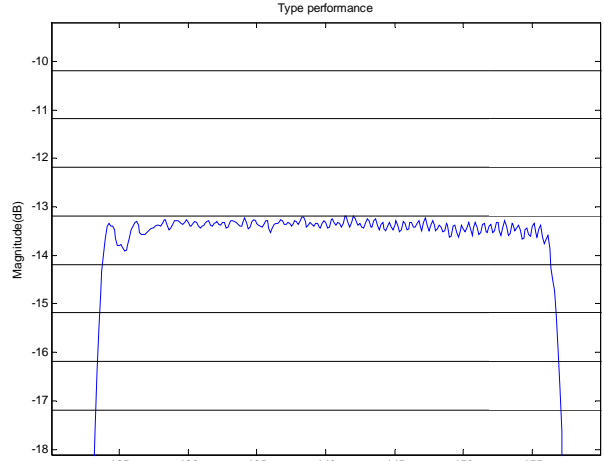
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Typical Performance

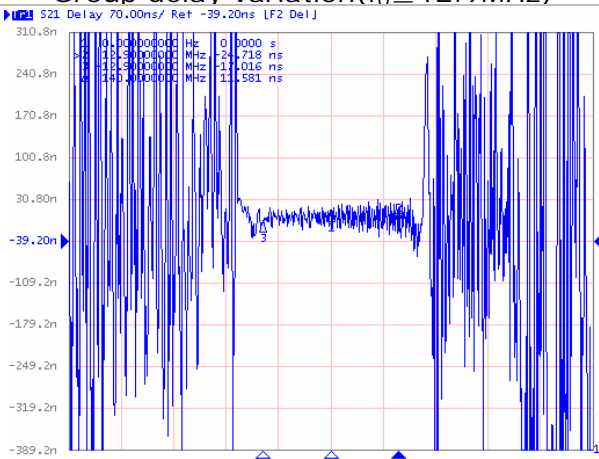
Frequency Respond



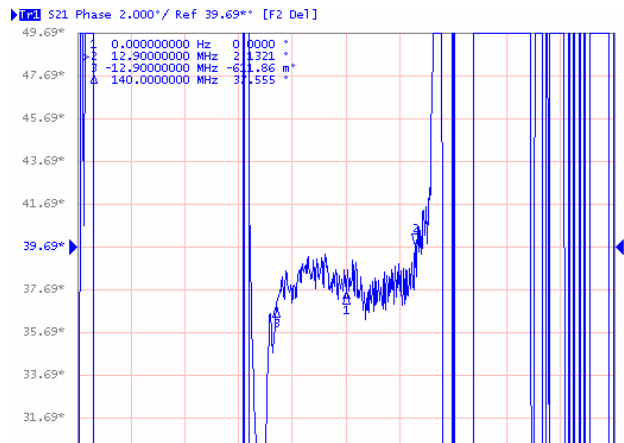
Passband Respond



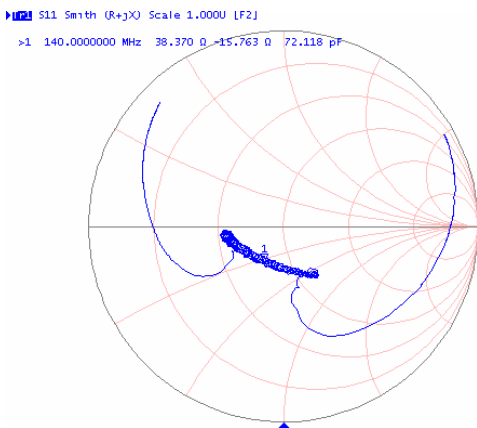
Group delay variation( $f_0 \pm 12.9\text{MHz}$ )



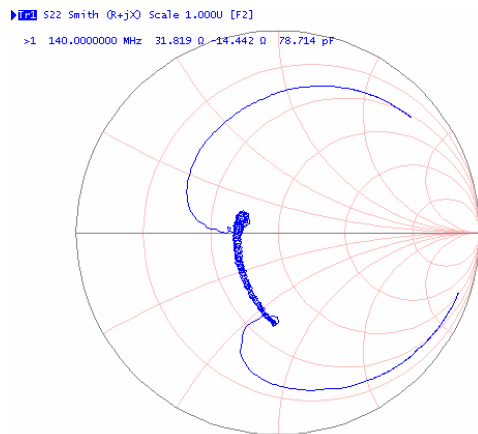
Phase Linearity( $f_0 \pm 12.9\text{MHz}$ )



Simth Chart S11



Simth Chart S22



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