

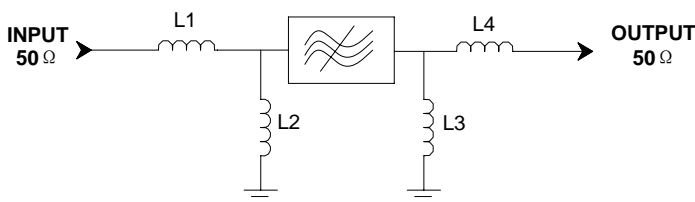
Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.9	140	140.1
Insertion Loss	dB	-	19	25
1 dB Bandwidth	MHz	-	2.43	-
3 dB Bandwidth	MHz	2.5	2.67	-
40 dB Bandwidth	MHz	-	3.64	3.8
Passband Variation	dB	-	0.4	-
Absolute Delay	usec	-	2.75	-
Group Delay Variation($f_0 \pm 1.2\text{MHz}$)	nsec	-	110	200
Ultimate Rejection	dB	45	55	-
Material Temperature coefficient	KHz/°C	0.14		
Ambient Temperature	°C	25		
Package Size	DIP2712 (27.0x12.8x4.7mm3)			

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

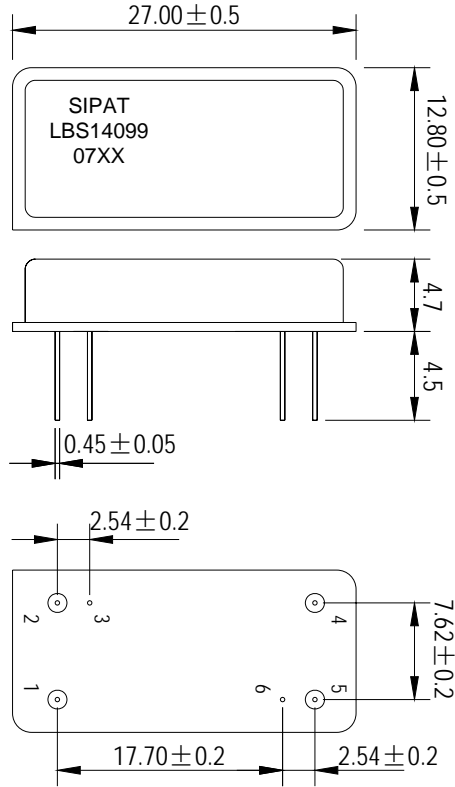


L1=100nH L2=120nH
L3=L4=82nH
Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

	SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBS14099	
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Package Dimension



- 1) ∴ Pad Number 1 Index
- 2) SIPAT: Manufacturer name
- 3) LBS14099: Part Number
- 4) 07XX: Date Code

Input	1
Output	5
Ground	All Others

Package: DIP2712

Unit: mm

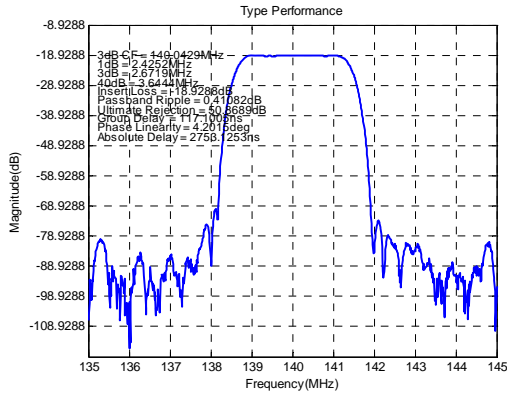


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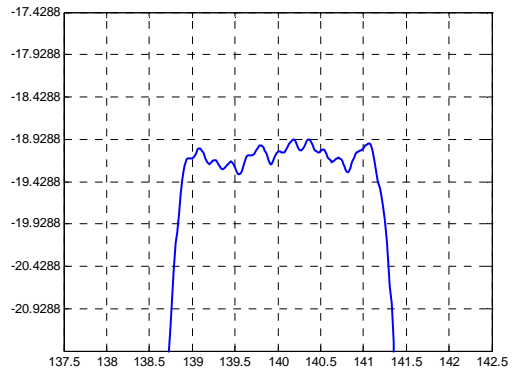
Typical Performance

Frequency Respond



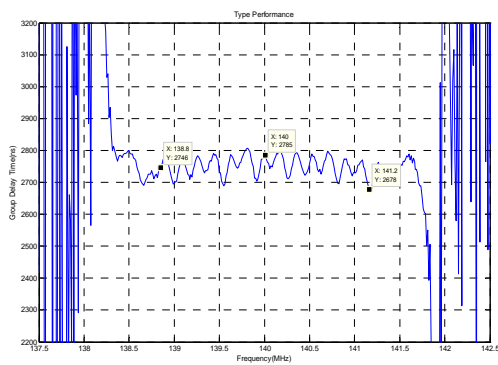
Horizontal: 1MHz/Div Vertical: 10dB/Div

Passband Respond



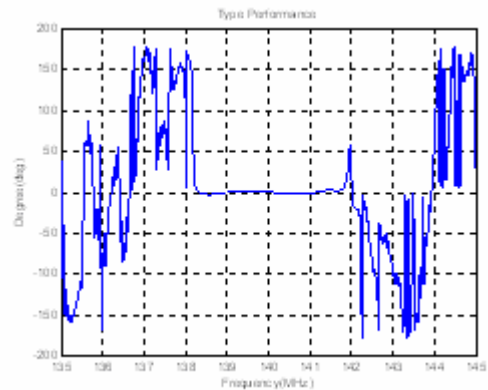
Horizontal: 0.5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 1.2\text{MHz}$)



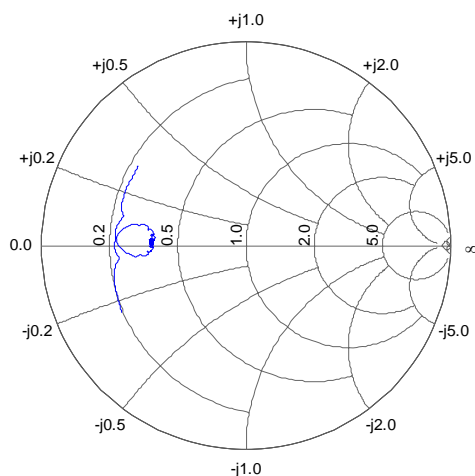
Horizontal: 0.5MHz/Div Vertical: 100ns/Div

Phase Linearity($f_0 \pm 1.2\text{MHz}$)

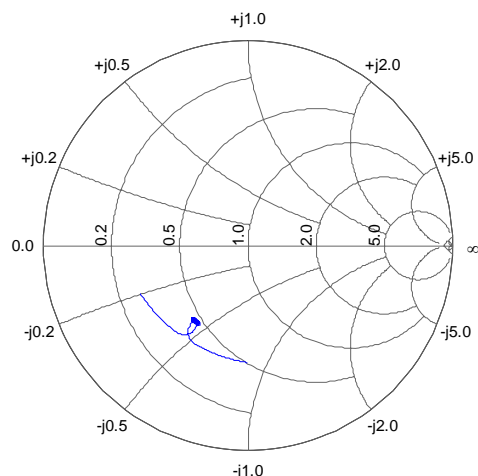


Horizontal: 0.5MHz/Div Vertical: 2deg/Div

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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