



Features


- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

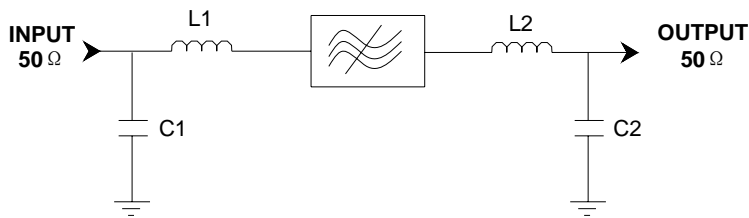
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.9	140	140.1
Insertion Loss	dB	23	24.6	27
2 dB Bandwidth	MHz	5	5.05	-
35 dB Bandwidth	MHz	-	6.34	6.4
48 dB Bandwidth	MHz	-	6.53	9.4
55 dB Bandwidth	MHz	-	6.63	11
Passband Variation	dB	-	0.5	1.2
Absolute Delay	usec	-	2.64	2.9
Phase Linearity($f_0 \pm 2.3\text{MHz}$)	deg	-	2	-
Group Delay Variation($f_0 \pm 2.3\text{MHz}$)	nsec	-	50	-
Ultimate Rejection($f_0 \pm 10 \sim f_0 \pm 15\text{MHz}$)	dB	53	64	-
Material Temperature coefficient	KHz/°C	0.14		
Substrate Material	-	Qz		
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	DIP2712 (27.0x12.8x4.7mm3)			

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	LBS14094	
		Rev. Date	2008-03-21	
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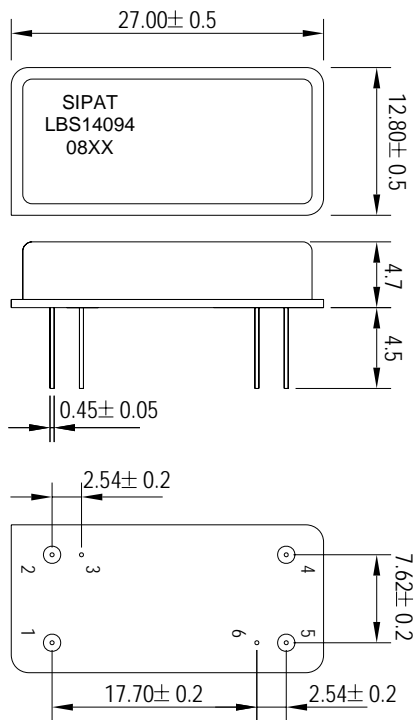
Matching Configuration



L1=(100+10)nH L2=82nH
C1=C2=36pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 1
Output 5
Ground All Others

Marking Configuration:

1) SIPAT: Manufacturer Name
2) LBS14094: Part Number
3) 08XX: Date Code

Package: DIP2712

Unit: mm

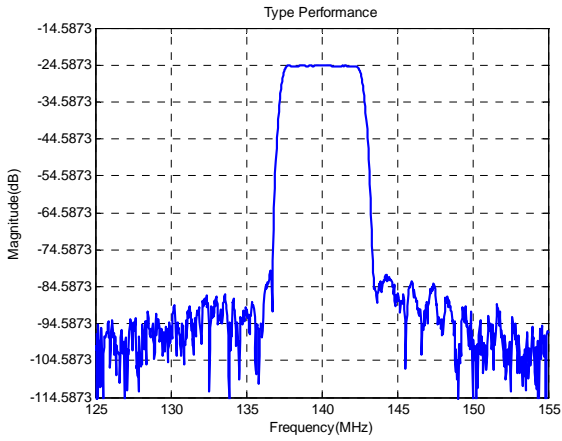


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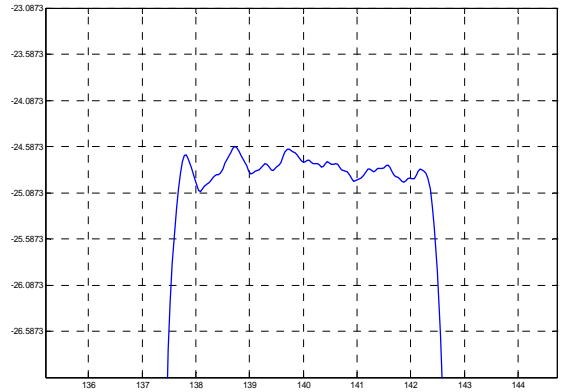
Typical Performance

Frequency Respond



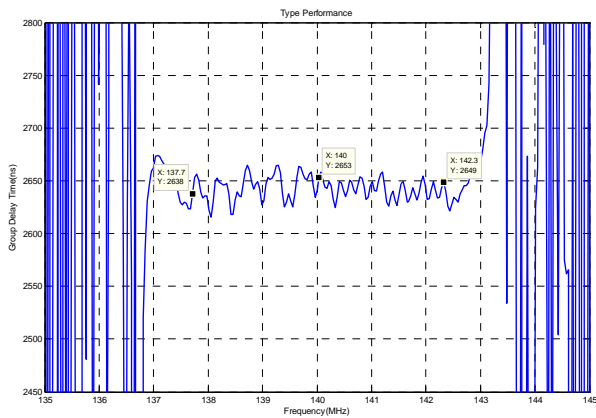
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



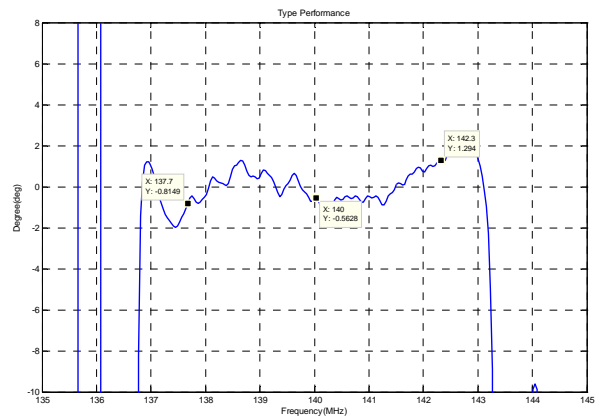
Horizontal: 1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 2.3\text{MHz}$)



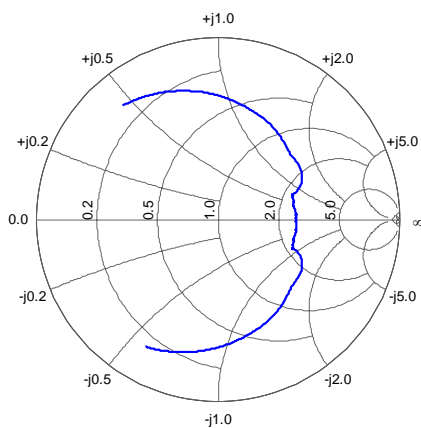
Horizontal: 1MHz/Div Vertical: 50ns/Div

Phase Linearity($f_0 \pm 2.3\text{MHz}$)

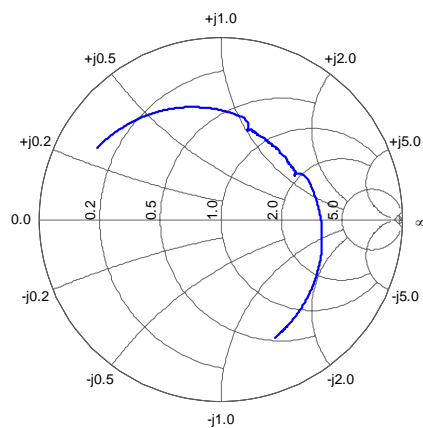


Horizontal: 1MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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