

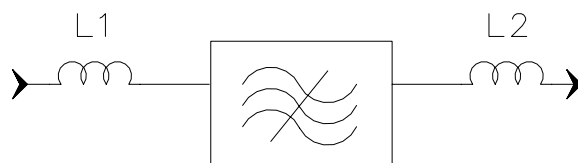
Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.875	140	140.125
Insertion Loss	dB	-	27.9	30
1.5 dB Bandwidth	MHz	20.1	20.14	-
3 dB Bandwidth	MHz	-	20.41	-
40 dB Bandwidth	MHz	-	21.88	-
45 dB Bandwidth	MHz	-	21.98	22.05
50 dB Bandwidth	MHz	-	22.14	-
Passband Variation	dB	-	0.8	1.5
Absolute Delay	usec	-	2	2.4
Phase Linearity($f_0 \pm 10\text{MHz}$)	deg	-	8	-
Ultimate Rejection	dB	45	50	-
Material Temperature coefficient	KHz/°C	-13.16		
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



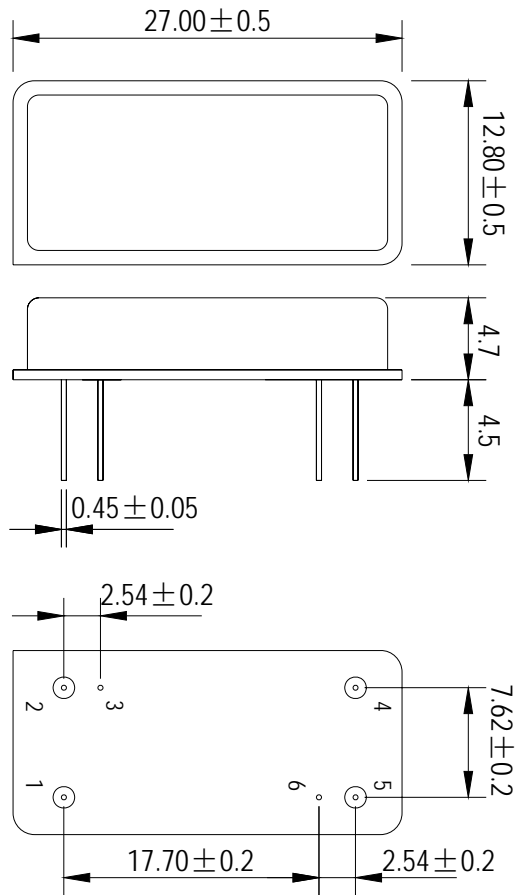
$$L1=L2=18\text{nH}$$

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	LBN14081	
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Package Dimension



Input:1
Output:5

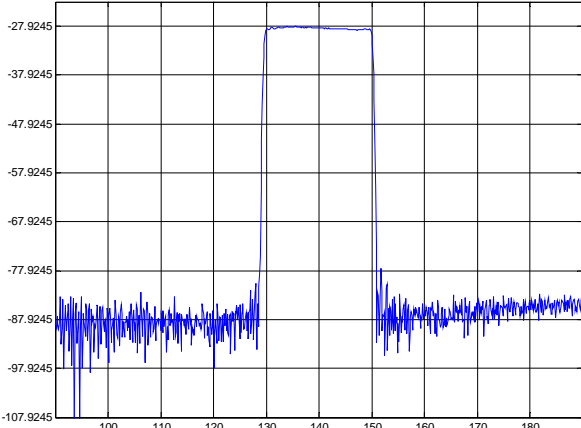


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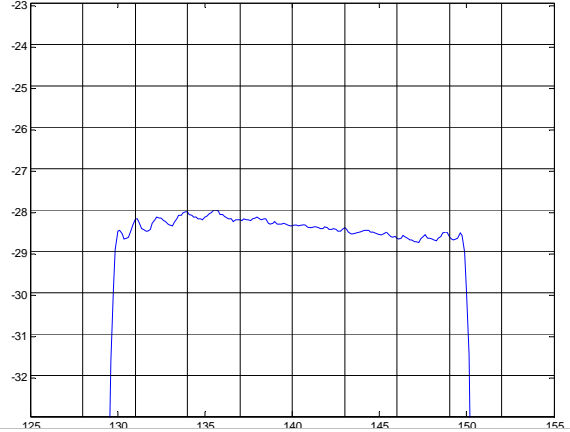
Typical Performance

Frequency Respond



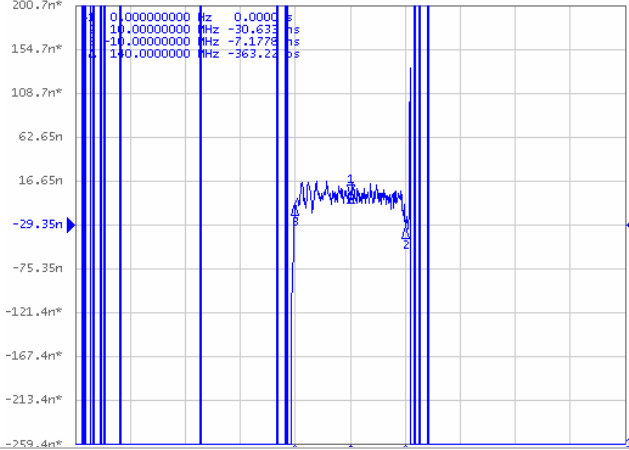
Group Delay Variation($f_0 \pm 10\text{MHz}$)

Passband Respond



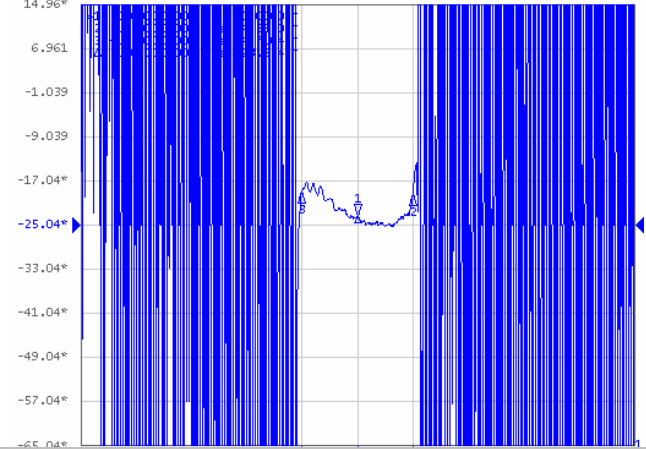
Phase Linearity($f_0 \pm 10\text{MHz}$)

S21 Delay 46.00ns/ Ref -29.35ns [F2 Del]



Smith Chart S11

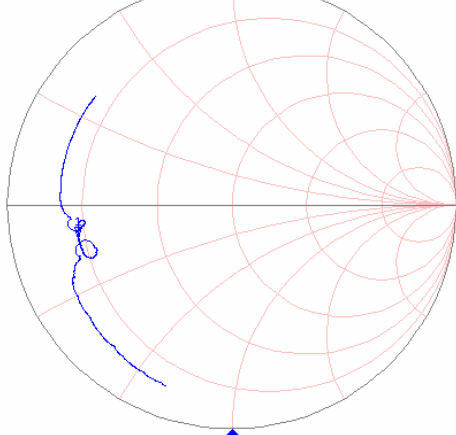
S21 Phase 8.000*/ Ref -25.04** [F2 Del]



Smith Chart S22

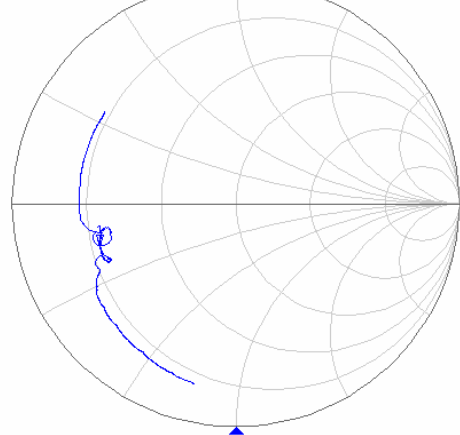
S11 Smith (R+jX) Scale 1.000U [F2]

>1 140.0000000 MHz 8.9288 Ω -5.3763 Ω 211.45 pF



S22 Smith (R+jX) Scale 1.000U [F2]

>1 140.0000000 MHz 11.339 Ω -7.2643 Ω 156.49 pF



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