Features

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

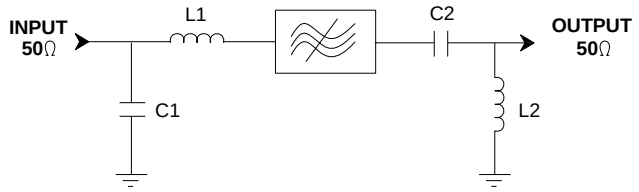
Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	140	-
Insertion Loss	dB	-	31.7	34
1.2 dB Bandwidth	MHz	6.4	6.44	-
23 dB Bandwidth	MHz	-	7.13	7.2
38 dB Bandwidth	MHz	-	7.28	7.6
50 dB Bandwidth	MHz	-	7.36	8.4
56 dB Bandwidth	MHz	-	7.51	10.4
Passband Variation	dB	-	0.7	1.2
Absolute Delay	usec	-	4.42	4.5
Ultimate Rejection	dB	50	54	-
Material Temperature coefficient	KHz/°C	-2.52		
Substrate Material	-	112LT		
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	DIP3512 (35.0x12.8x4.7mm3)			

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.

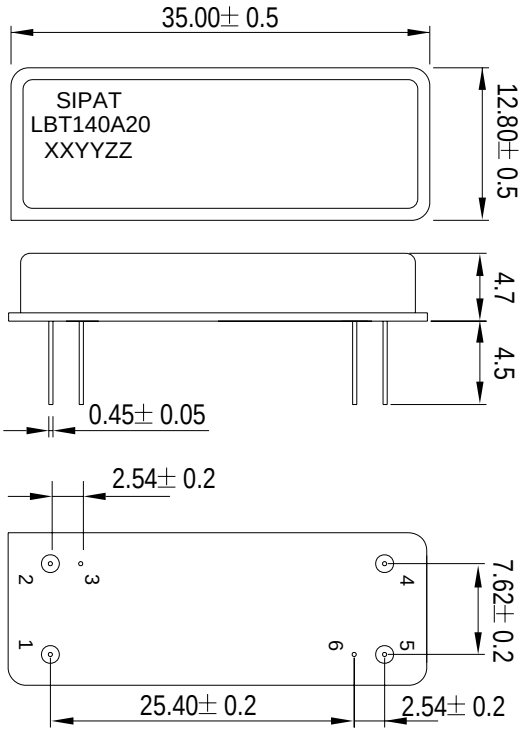
Matching Configuration



L1=47nH L2=33nH
C1=C2=56pF
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

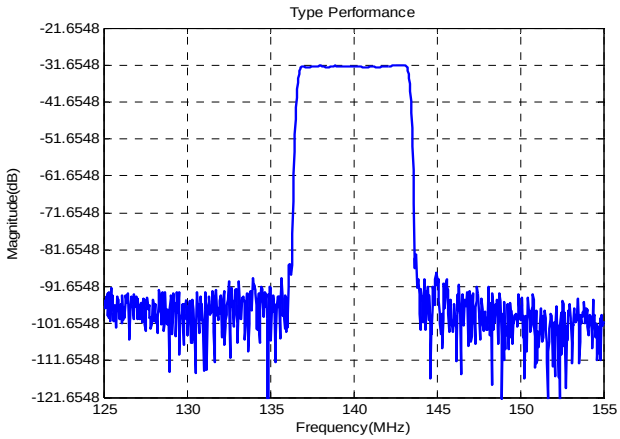
Marking Configuration:

1) SIPAT: Manufacturer Name
2) LBT140A20: Part Number
3) XXYY: Date(Year/month)
4) ZZ: Identified Code

Package: DIP3512 **Unit: mm**

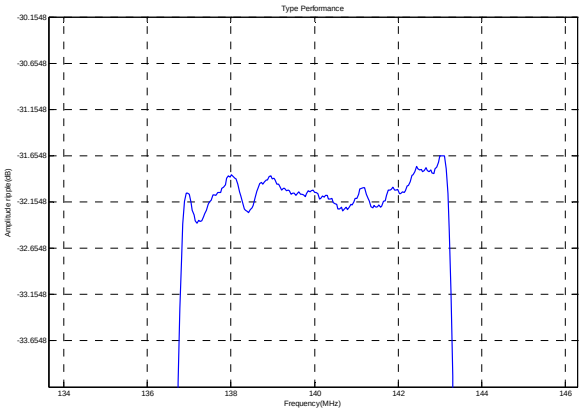
Typical Performance

Frequency Respond



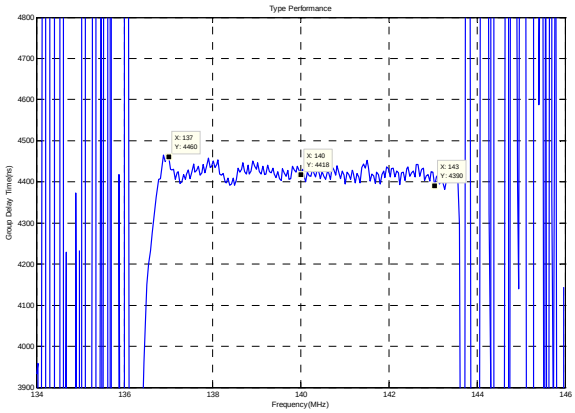
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



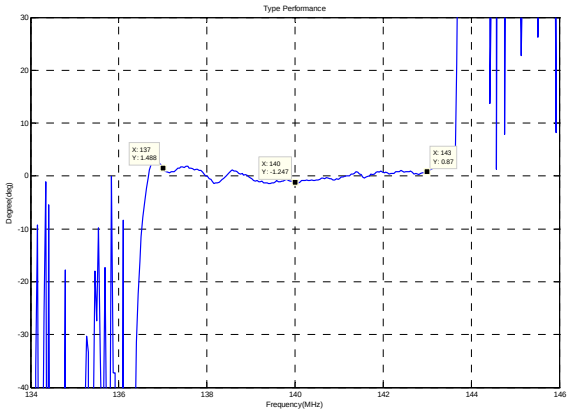
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±3MHz)



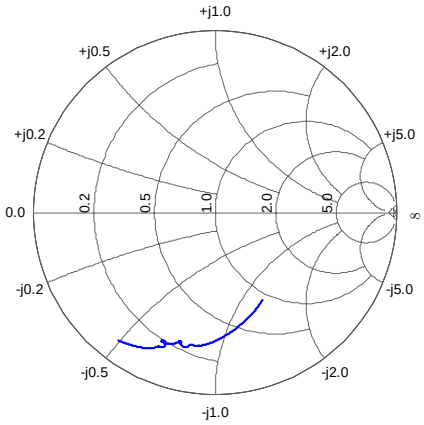
Horizontal: 2MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±3MHz)



Horizontal: 2MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22

