❒ Electrical Characteristics

Maximum Ratings

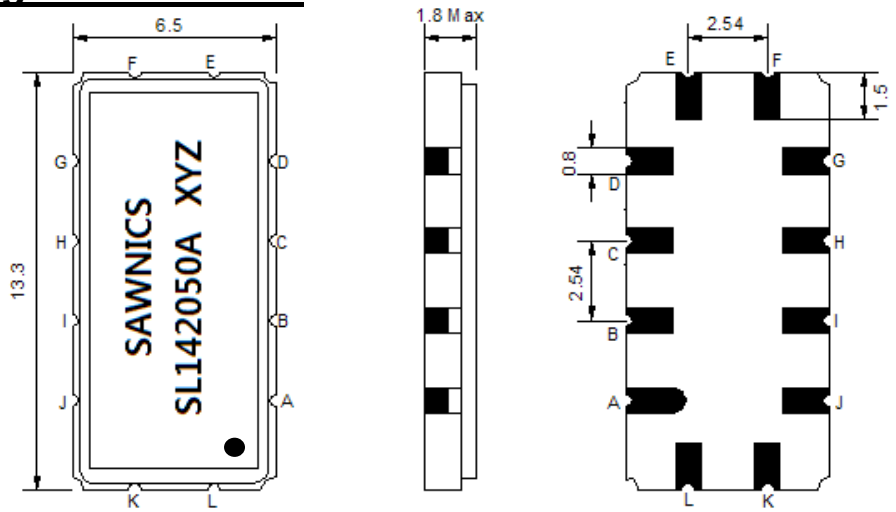
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	V			
Length x Width	mm²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	142.35	142.5	142.65
Insertion Loss at Fo	dB	-	12.7	15.0
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple within fo ±2.2 MHz	dB_{p-p}	-	0.3	0.8
Group Delay Variation within fo ±2.2 MHz	nsec	-	40	80
Absolute Delay at Fo	µsec	-	1.17	-
Bandwidth at –1.0 dB	MHz	5.0	5.2	-
Bandwidth at –3.0 dB	MHz	-	5.8	-
Bandwidth at –35.0 dB	MHz	-	8.0	8.5
Relative Attenuation:				
Lower Sidelobe	dB	45	48	-
Upper Sidelobe	dB	45	48	-

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

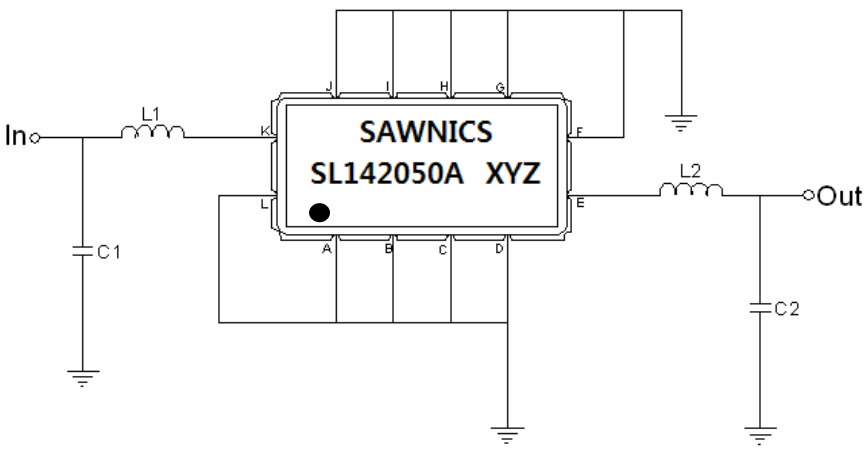
❒ Package Dimensions



① SAWNICS: Brand
② SL142050A: Model Name
③ X : Date Code (Year)
④ Y : Date Code (Month)
⑤ Z : Date Code (Date)
● : Index Dot

Pin Description	
A, B, C, D, F, G, H, I, J, L	Ground
K	Input
E	Output

❒ Testing Environment

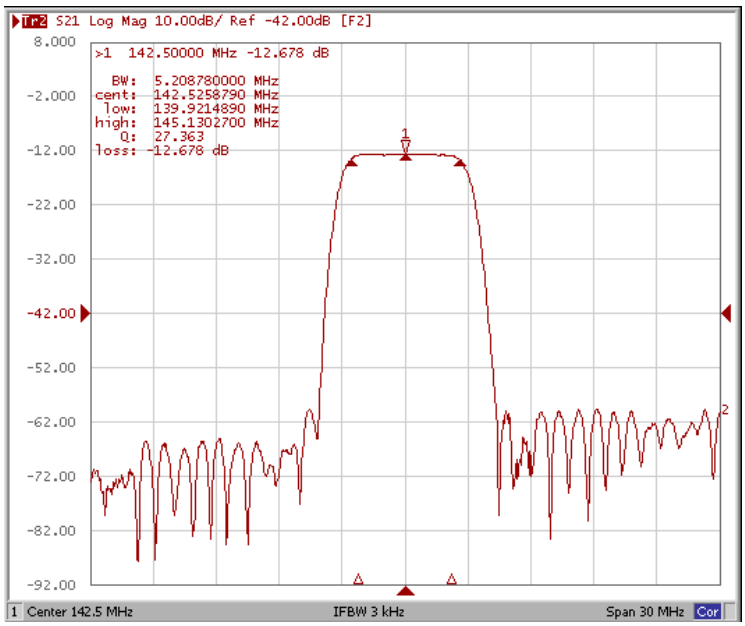


Test Fixture & Values	
Input	L1=33nH , C1=36pF
Output	L2=33nH , C1=36pF
Source/Load Impedance	50 Ω

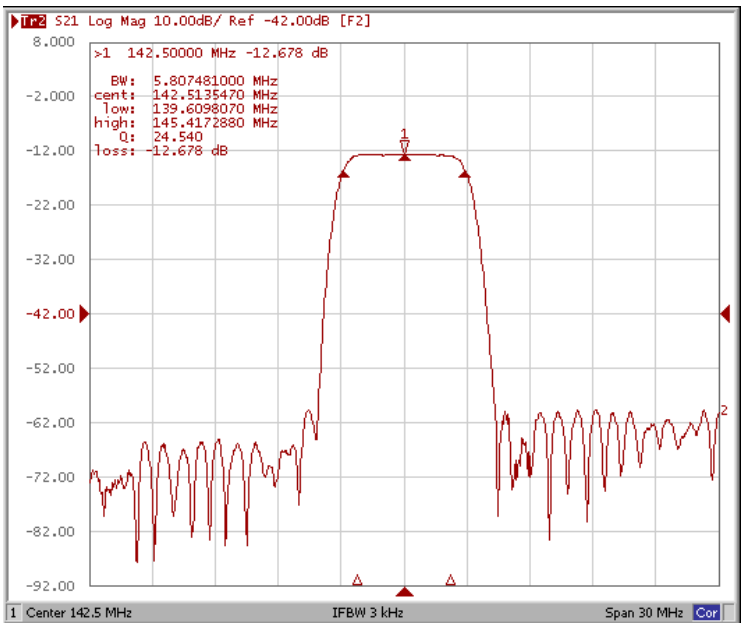
❒ Frequency Characteristics

Frequency Response

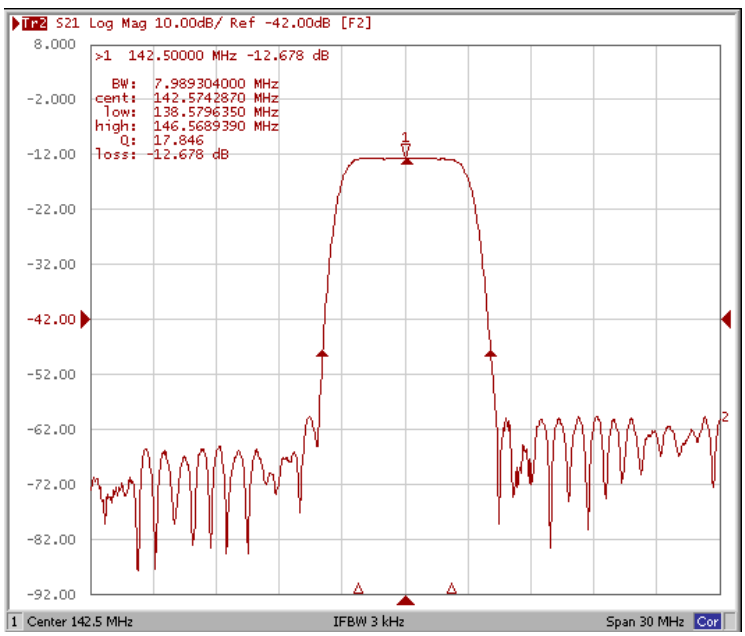
Bandwidth at –1.0 dB



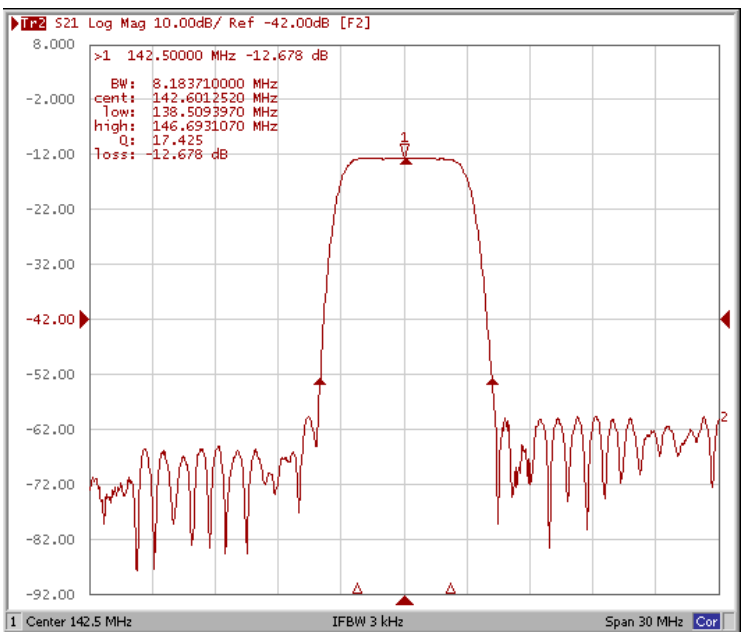
Bandwidth at –3.0 dB



Bandwidth at –35.0 dB



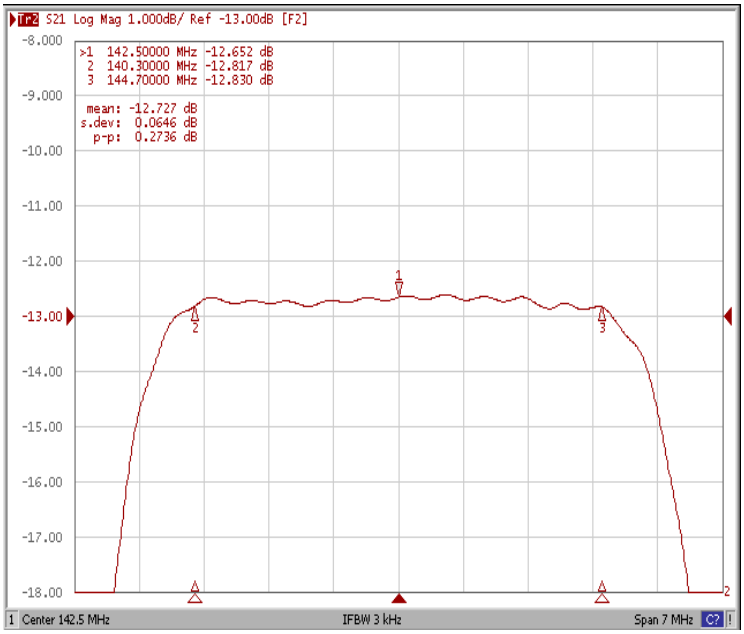
Bandwidth at –40.0 dB



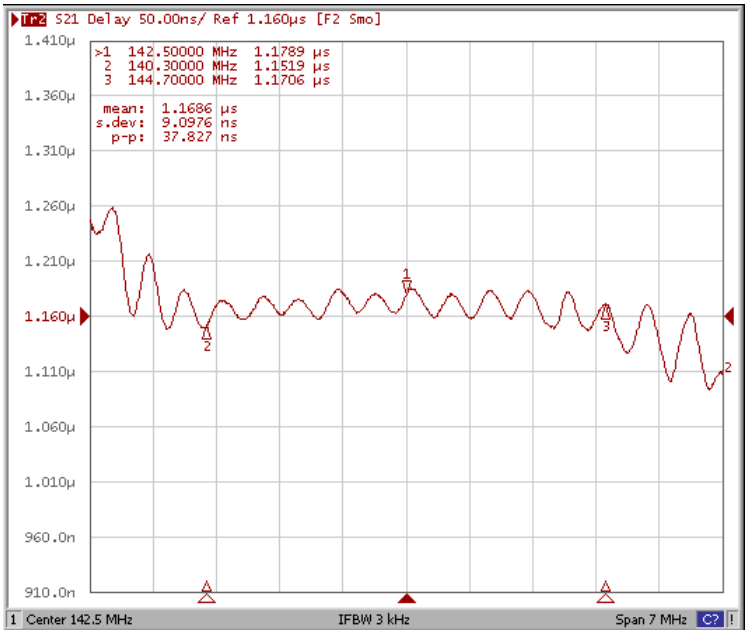
❒ Frequency Characteristics

Frequency Response

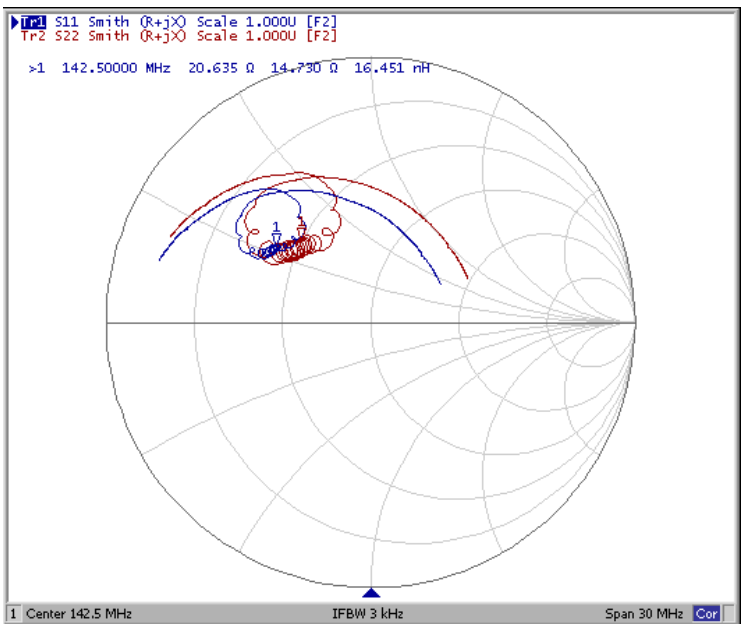
Ripple Variation Fo±2.2MHz



Group Delay Variation Fo±2.2MHz



Smith Chart



SWR