

## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-30	-	80
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	D1			
Length x Width	mm <sup>2</sup>	-	20.0 x 9.8	-
Height	mm	-	-	1.8

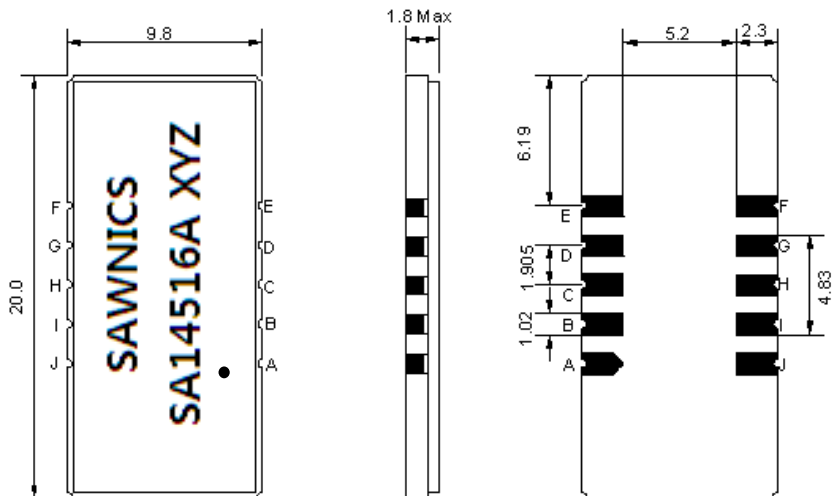
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	145.0	-
Insertion Loss at Fo	dB	-	20.6	23.0
Group Delay Variation (Fo±7.56MHz)	ns	-	58	80
Absolute Delay	us	-	2.3	-
Passband Ripple (Fo±7.56MHz)	dB	-	0.7	1.0
Bandwidth at -1dB	MHz	15.80	16.25	-
Bandwidth at -10dB	MHz	-	17.12	-
Bandwidth at -20dB	MHz	-	17.50	-
Bandwidth at -40dB	MHz	-	17.90	-
Ultimate Rejection	dB	45	50	-
Temperature coefficient	ppm/°C	-	-72	-

**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.

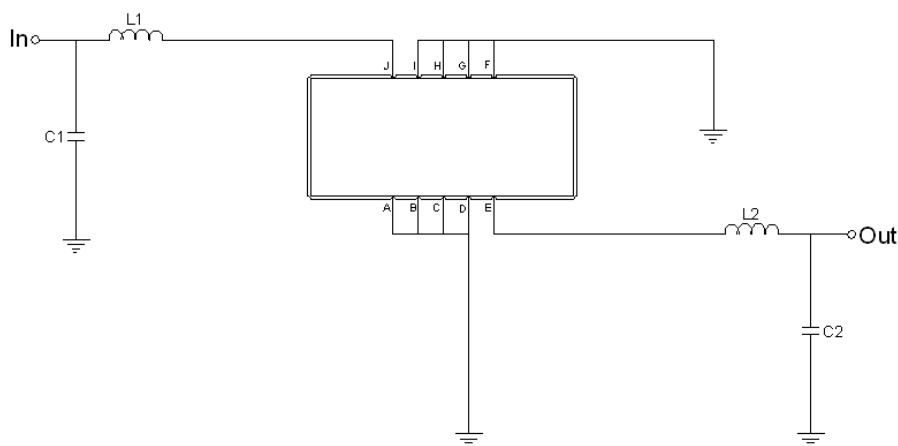
## Package Dimensions



- ① SAWNICS: Brand
- ② SA14516A: 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	Ground
J	Input
E	Output

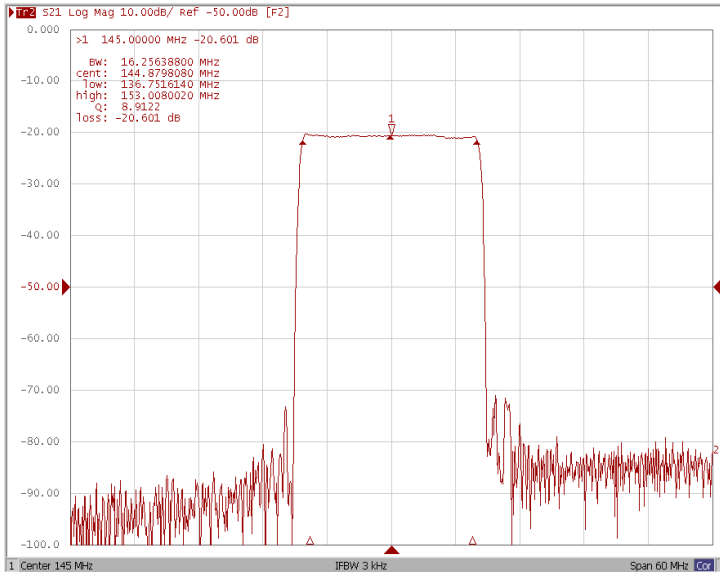
## Testing Environment



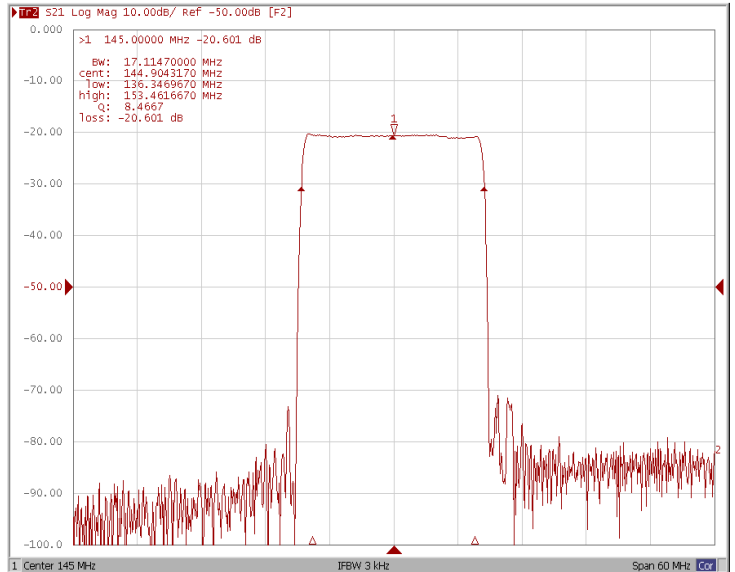
Test Fixture & Values	
Input	L1=33nH, C1=14pF
Output	L2=39nH, C2=22pF
Source/Load Impedance	50 Ω

## Frequency Response

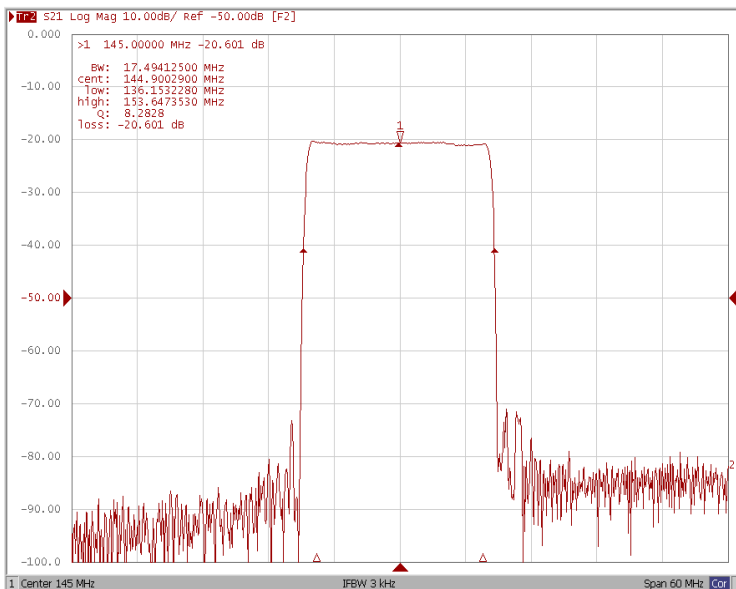
### Bandwidth at -1.0 dB



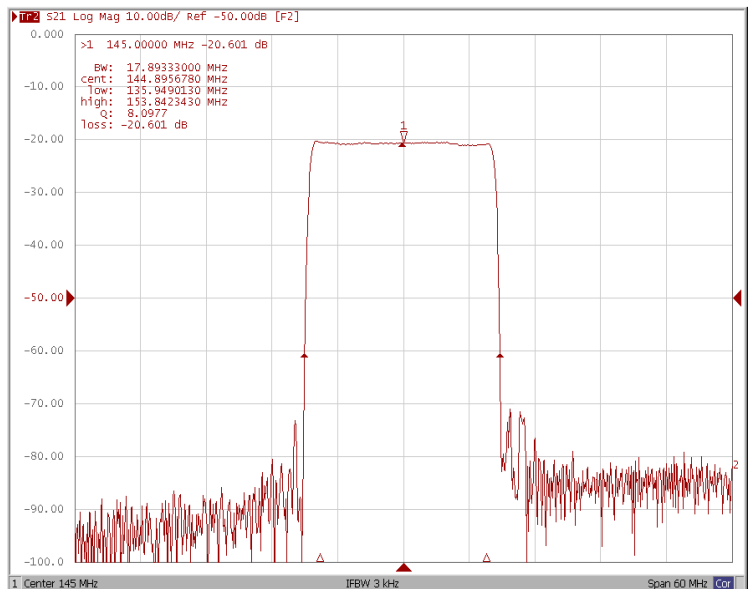
### Bandwidth at -10.0 dB



### Bandwidth at -20.0 dB



### Bandwidth at -40.0 dB

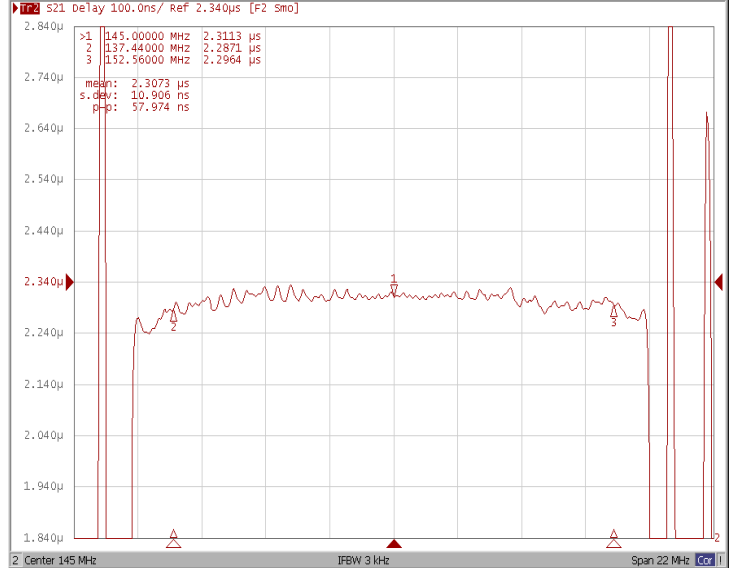


## Frequency Response

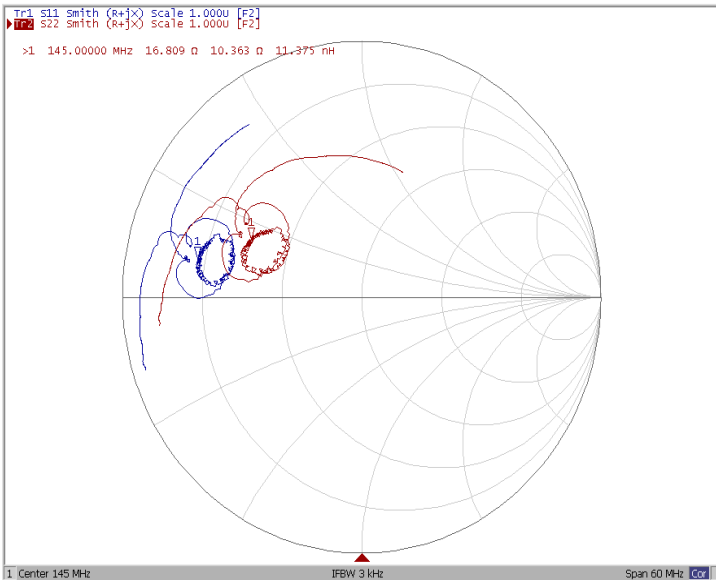
### Ripple Variation Fo±7.56MHz



### Group Delay Variation Fo±7.56MHz



### Smith Chart



### VSWR

