



*Total Solution Provider in Saw Device*

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# SA14526CD1

145.0 MHz IF SAW Filter  
26.35 MHz Bandwidth  
Revision 0: 21. April. 2009

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- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-10	-	70
Storage Temperature Range	°C	-40	-	85
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

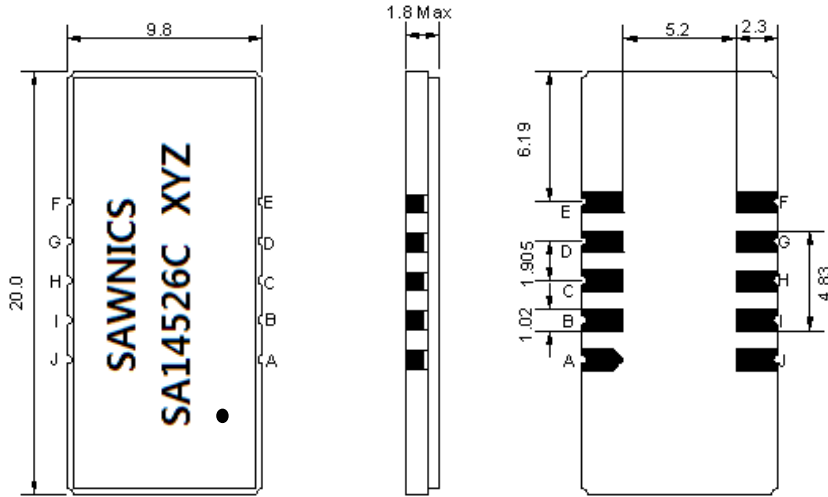
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	145.0	-
Insertion Loss at Fo	dB	-	24.90	27.00
Group Delay Variation (Fo±12.5MHz)	nsec	-	45	80
Absolute Delay	usec	-	2.33	-
Passband Ripple (Fo±12.5MHz)	dB	-	0.65	1.00
Bandwidth at -1dB	MHz	26.10	26.35	-
Bandwidth at -3dB	MHz	-	26.65	-
Bandwidth at -40dB	MHz	-	27.95	28.10
Bandwidth at -50dB	MHz	-	28.07	-
Ultimate Rejection	dB	48	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.

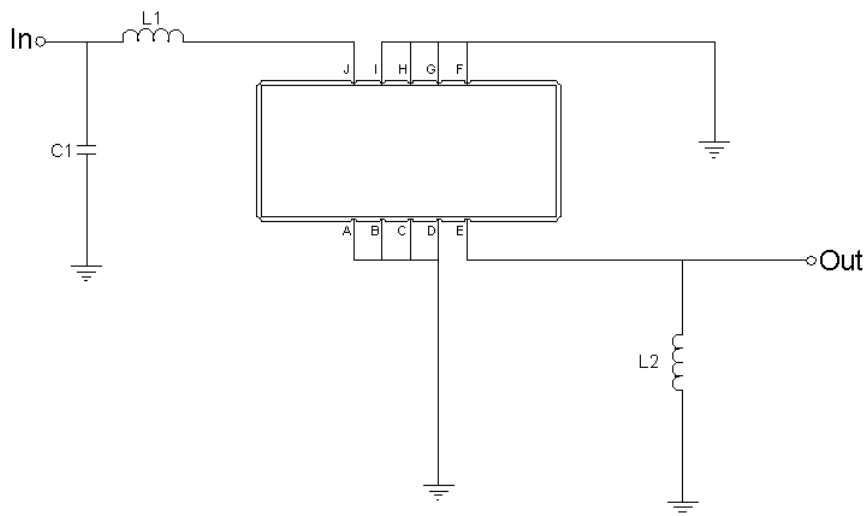
**Package Dimensions**



- ① SAWNICS: Brand
- ② SA14526C: 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**

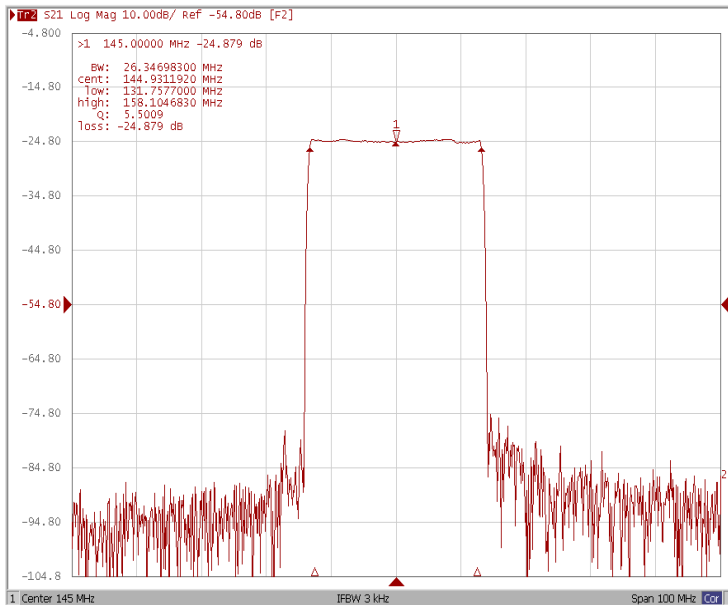


Test Fixture & Values	
Input	L1=39nH, C1=6pF
Output	L2=47nH
Source/Load Impedance	50 Ω

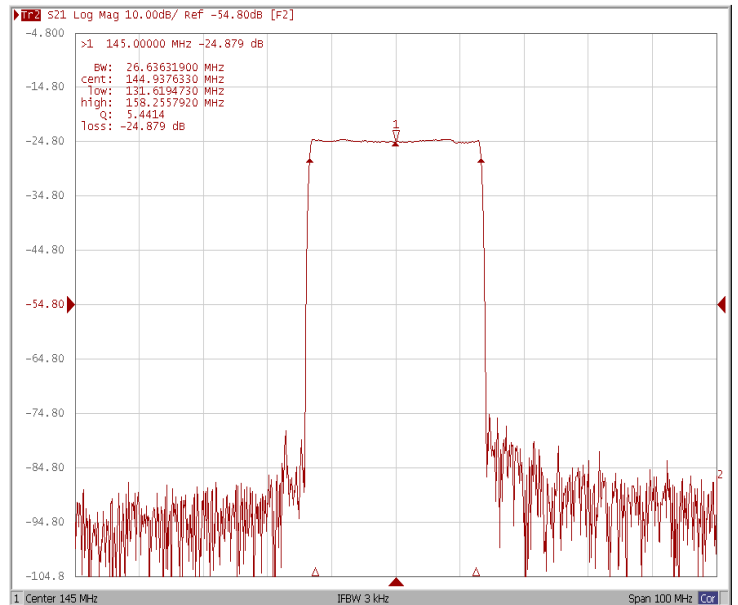
### Frequency Characteristics

#### Frequency Response

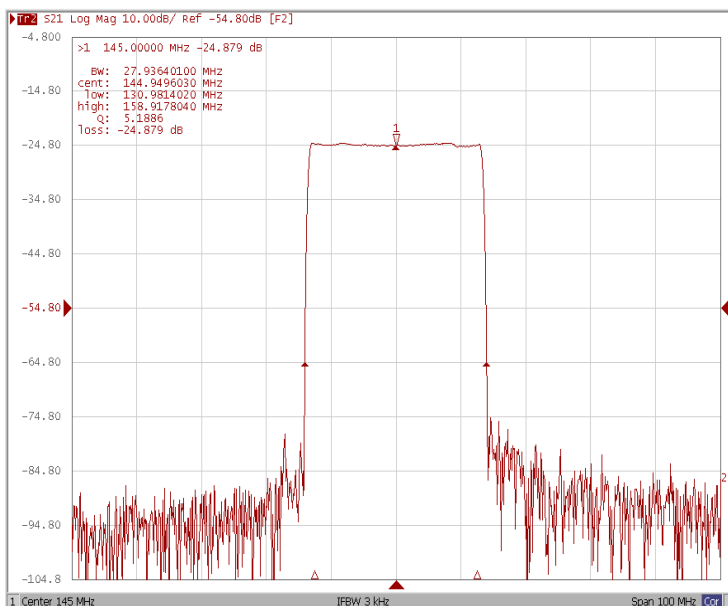
Bandwidth at -1.0 dB



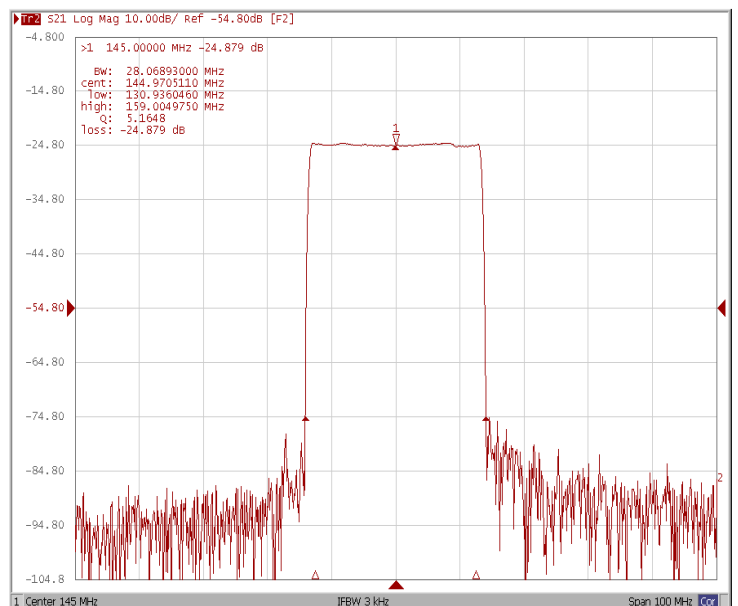
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



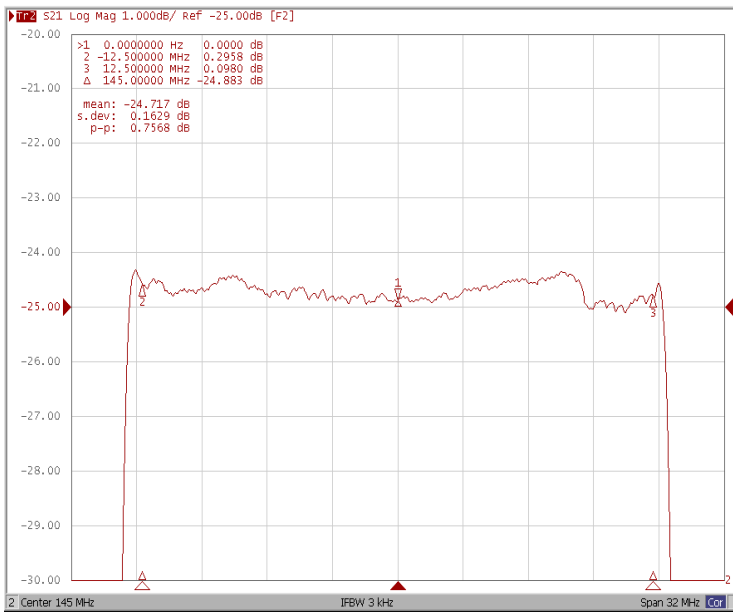
Bandwidth at -50.0 dB



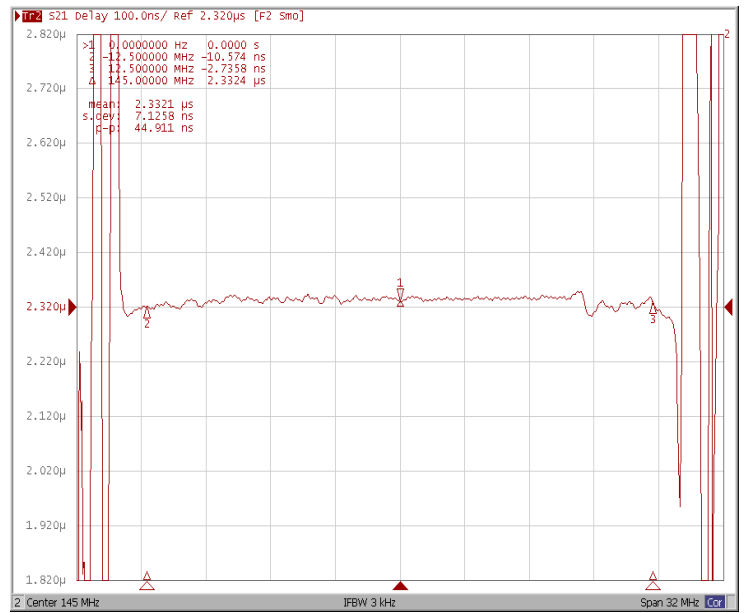
### Frequency Characteristics

#### Frequency Response

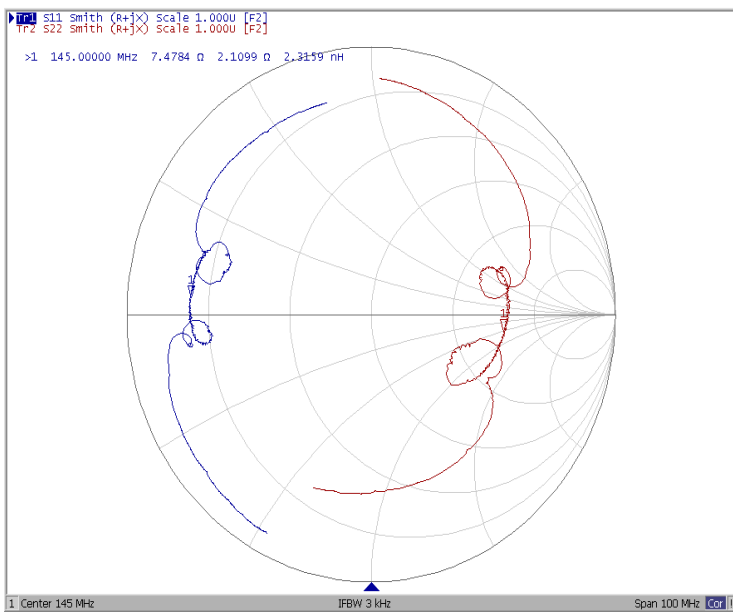
Ripple Variation  $F_o \pm 12.5\text{MHz}$



Group Delay Variation  $F_o \pm 12.5\text{MHz}$



Smith Chart



VSWR

