SA13326BD1

133.5 MHz IF SAW Filter
26.20 MHz Bandwidth
Revision 0: 22. July. 2008

RoHS compliance
Pb free

- ❒ Electrical Characteristics
- ❒ Package Dimensions
- ❒ Testing Environment
- ❒ Frequency Characteristics

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❒ Electrical Characteristics

Maximum Ratings

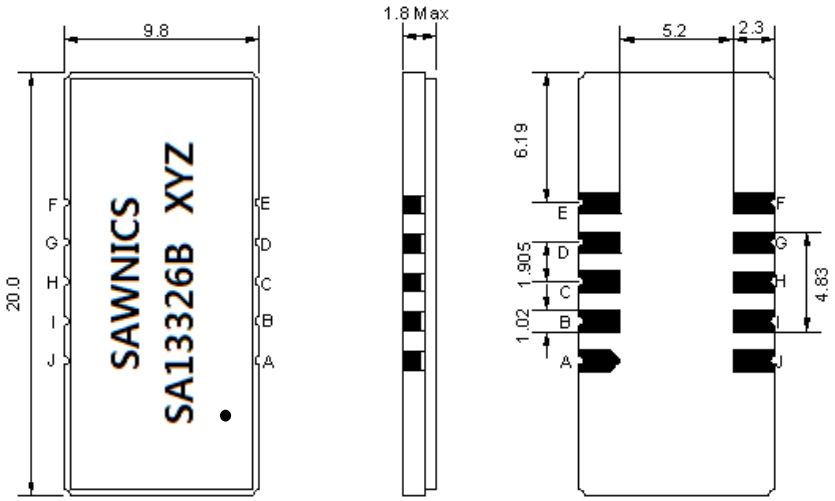
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0		70
Storage Temperature Range	°C	-30	-	80
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	V			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	133.50	-
Insertion Loss at Fo	dB	-	23.50	25.0
Group Delay Variation (Fo±12.5MHz)	ns	-	40	80
Absolute Delay	us	-	1.92	-
Passband Ripple (Fo±12.5MHz)	dB	-	0.75	1.2
Bandwidth at -1dB	MHz	25.00	26.20	-
Bandwidth at -10dB	MHz	-	27.15	27.30
Bandwidth at -20dB	MHz	-	27.60	27.80
Bandwidth at -30dB	MHz	-	27.90	28.10
Bandwidth at -45dB	MHz	-	28.25	
Ultimate Rejection	dB	-	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.

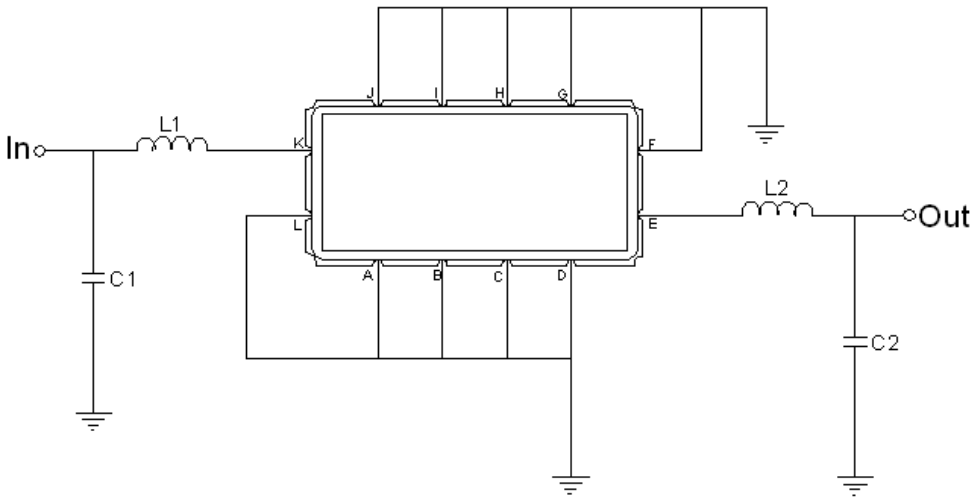
❒ Package Dimensions



① SAWNICS: Brand
② SA13326B: 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

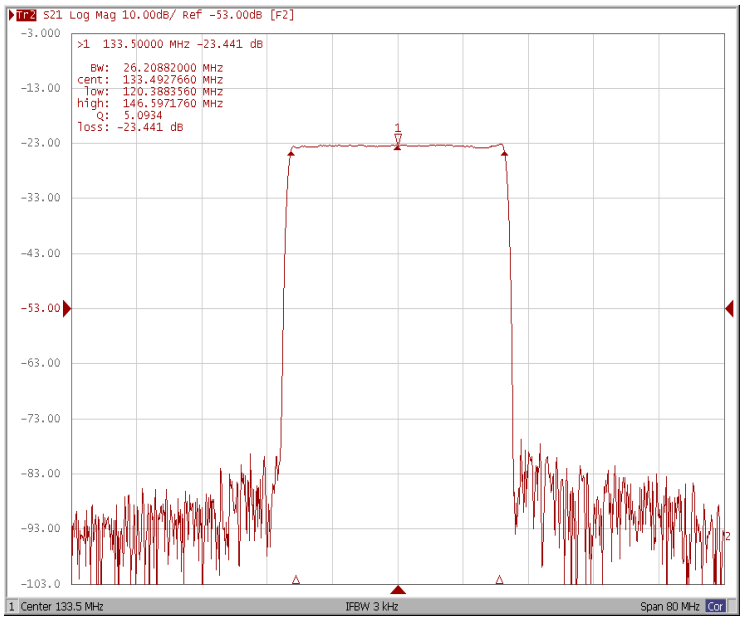


Test Fixture & Values	
Input	L1=68 nH, C1=10 pF
Output	L2=82nH, C2=22 pF
Source/Load Impedance	50 Ω

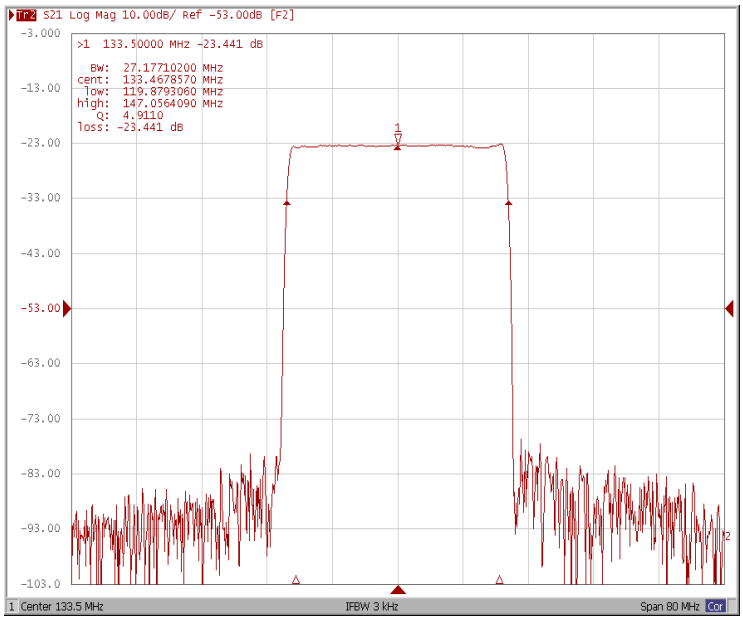
❒ Frequency Characteristics

Frequency Response

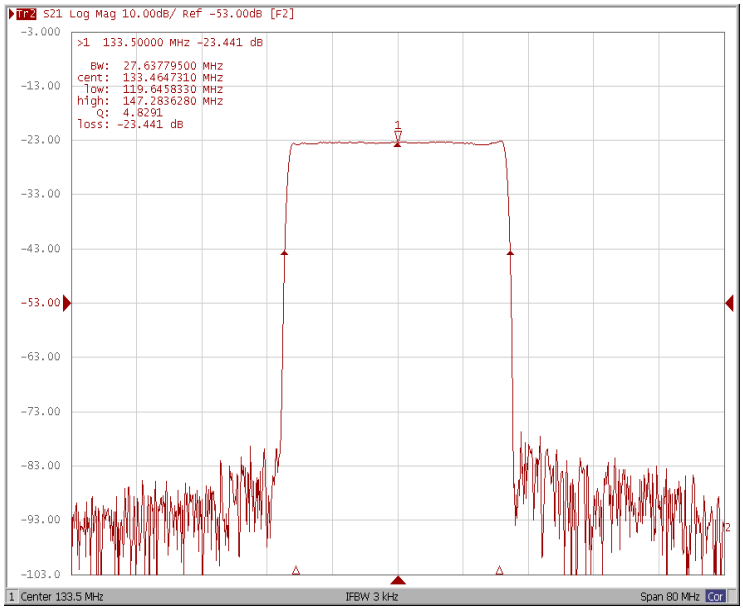
Bandwidth at –1.0 dB



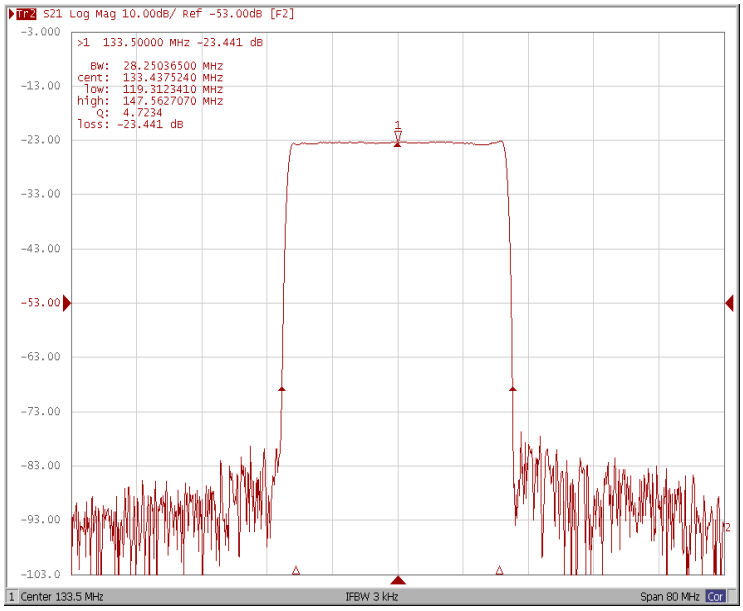
Bandwidth at –10.0 dB



Bandwidth at –20.0 dB



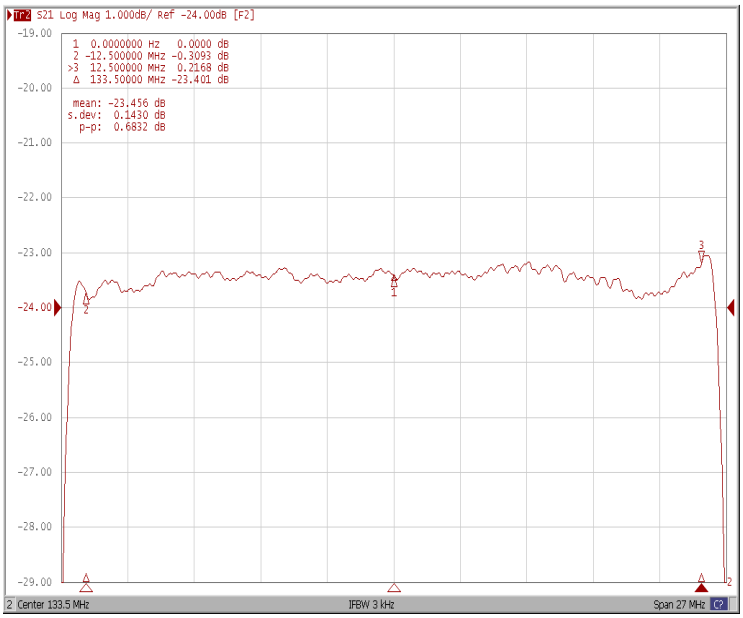
Bandwidth at –45.0 dB



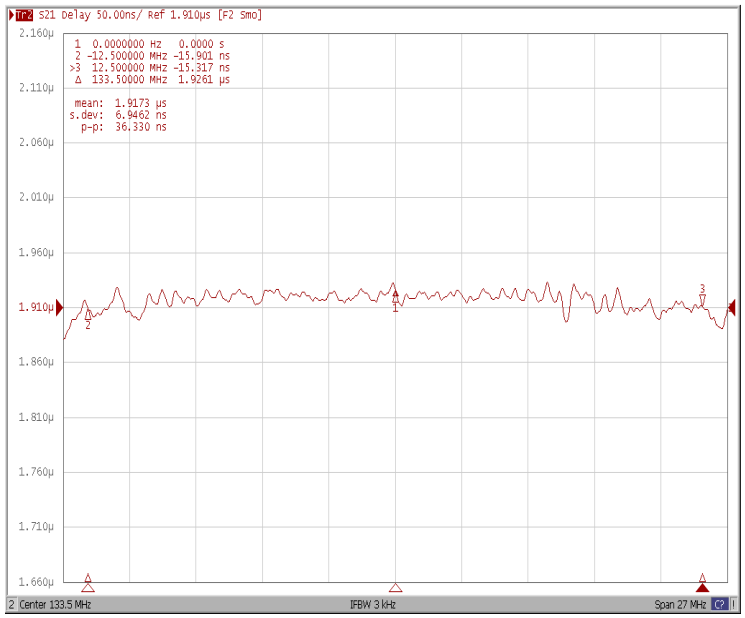
❒ Frequency Characteristics

Frequency Response

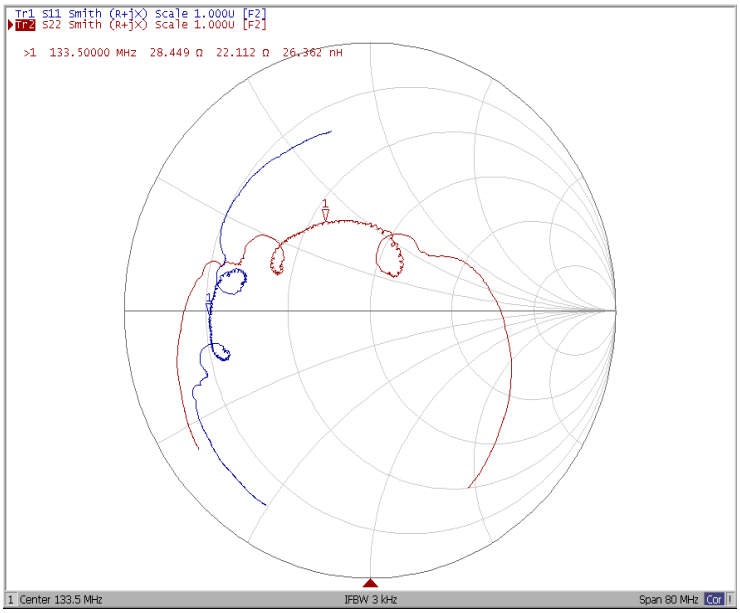
Ripple Variation Fo±12.5MHz



Group Delay Variation Fo±12.5MHz



Smith Chart



VSWR