❒ Electrical Characteristics

Maximum Ratings

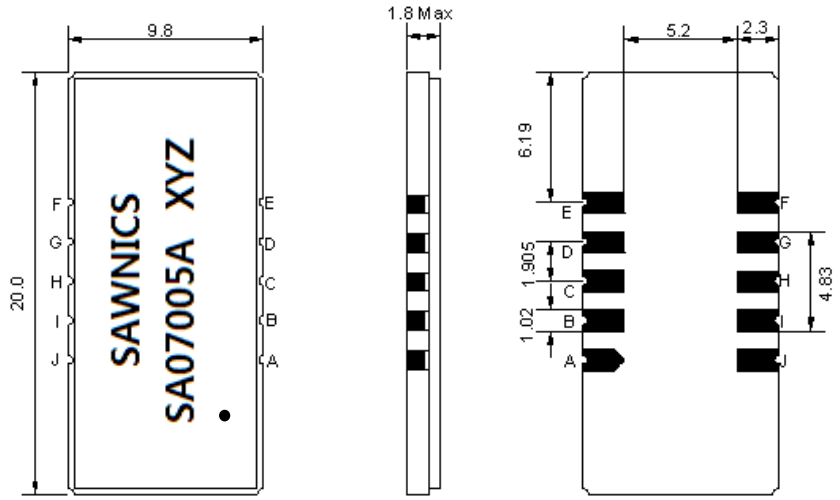
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.90	70.00	70.10
Insertion Loss at Fo	dB	-	15.80	18.00
Group Delay Variation at Fo ±2.4 MHz	nsec	-	135	180
Absolute Delay at Fo	usec	-	1.96	-
Passband Ripple Variation at Fo ±2.4 MHz	dB	-	0.55	1.0
Bandwidth at -1dB	MHz	5.20	5.40	-
Bandwidth at -3dB	MHz	5.70	5.82	-
Bandwidth at -40dB	MHz	-	7.54	7.70
Bandwidth at -50dB	MHz	-	7.70	-
Ultimate Rejection	dB	50	57	-
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.

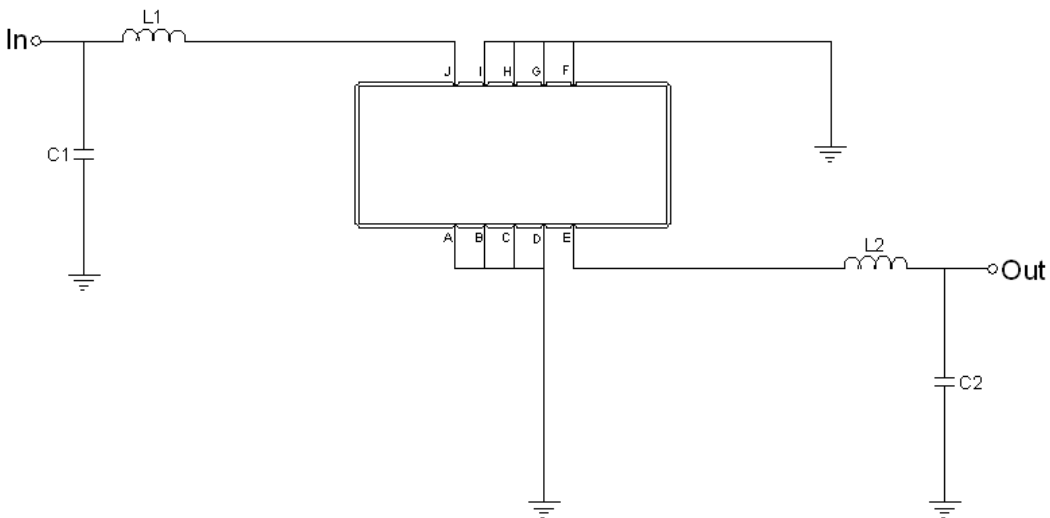
❒ Package Dimensions



① SAWNICS: Brand
② SA07005A: 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

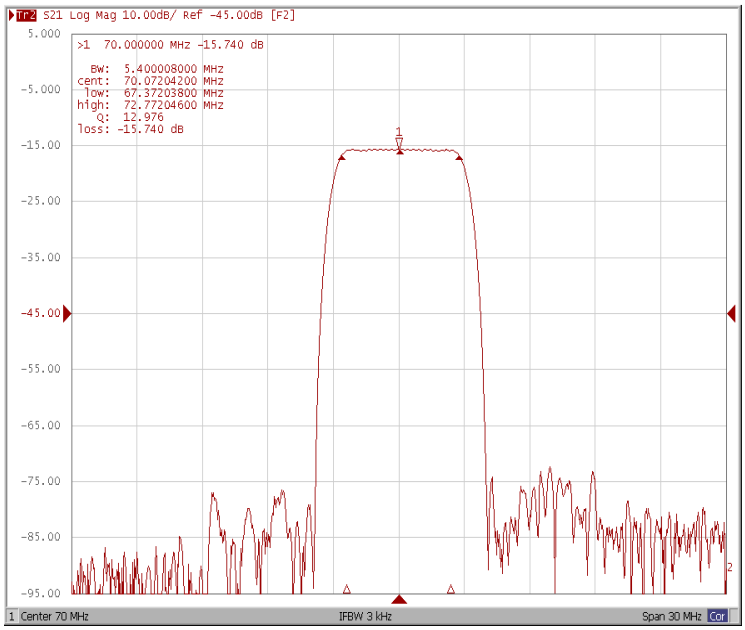


Test Fixture & Values	
Input	L1 = 82 nH , C1 = 15 pF
Output	L2 = 82 nH , C2 = 15 pF
Source/Load Impedance	50 Ω

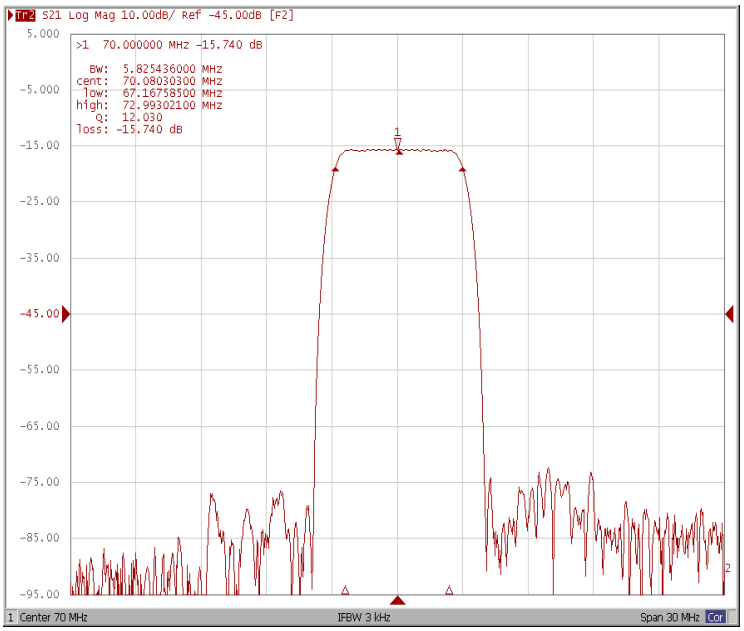
❒ Frequency Characteristics

Frequency Response

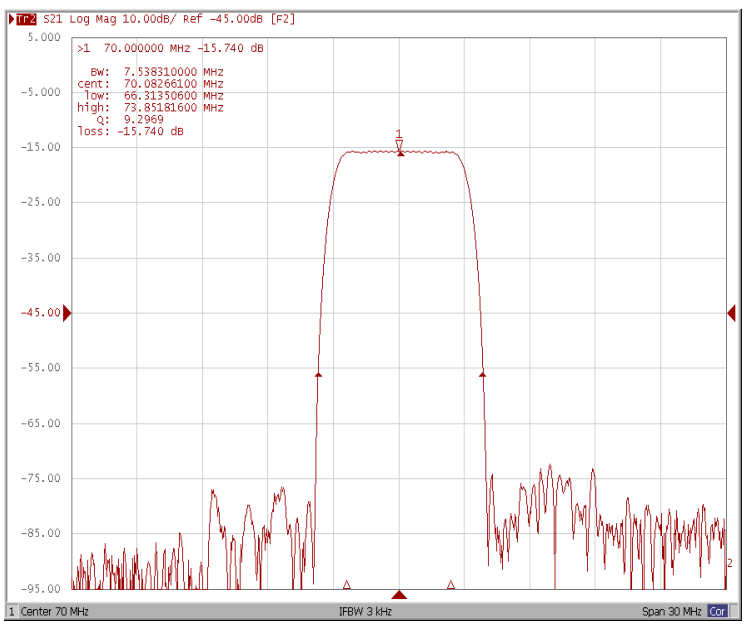
Bandwidth at –1.0 dB



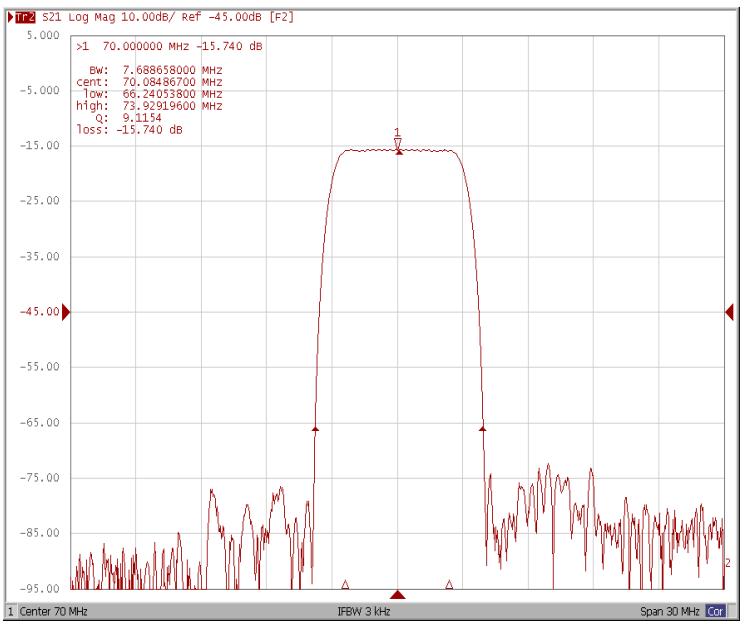
Bandwidth at –3.0 dB



Bandwidth at –40.0 dB



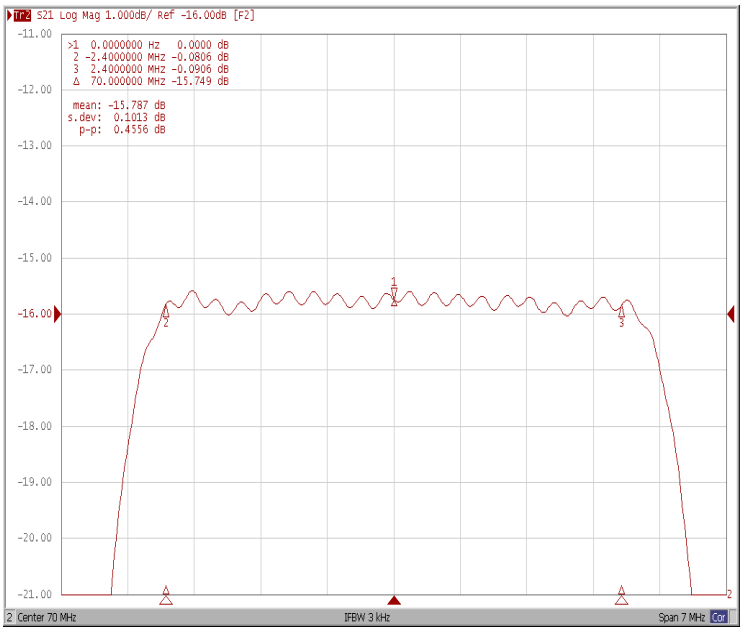
Bandwidth at –50.0 dB



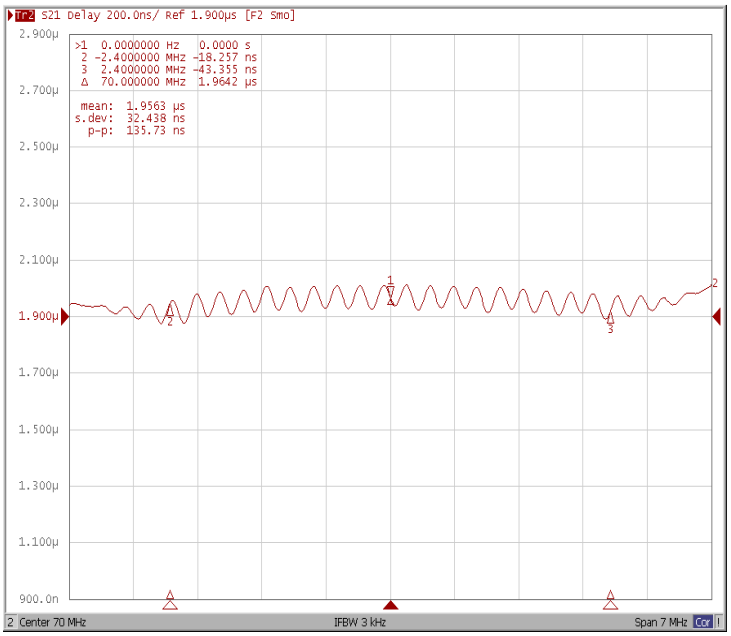
❒ Frequency Characteristics

Frequency Response

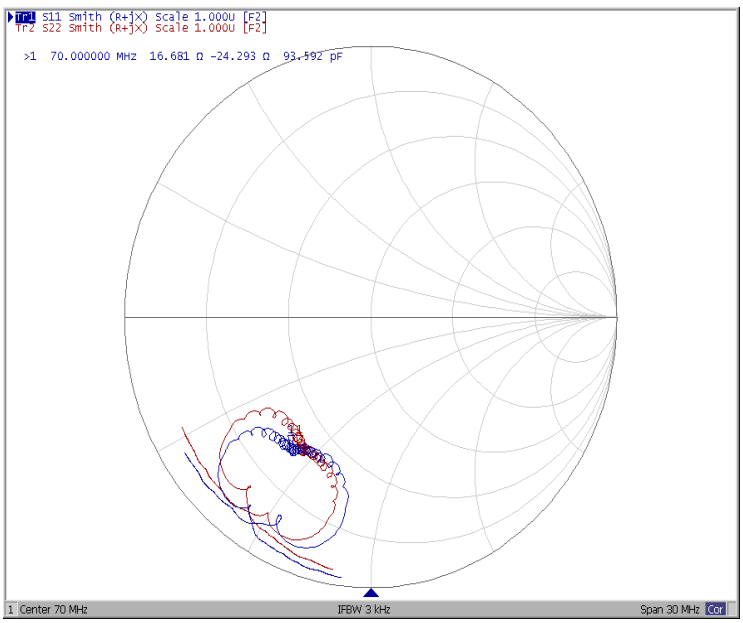
Ripple Variation Fo±2.4MHz



Group Delay Variation Fo±2.4MHz



Smith Chart



VSWR