❒ Electrical Characteristics

Maximum Ratings

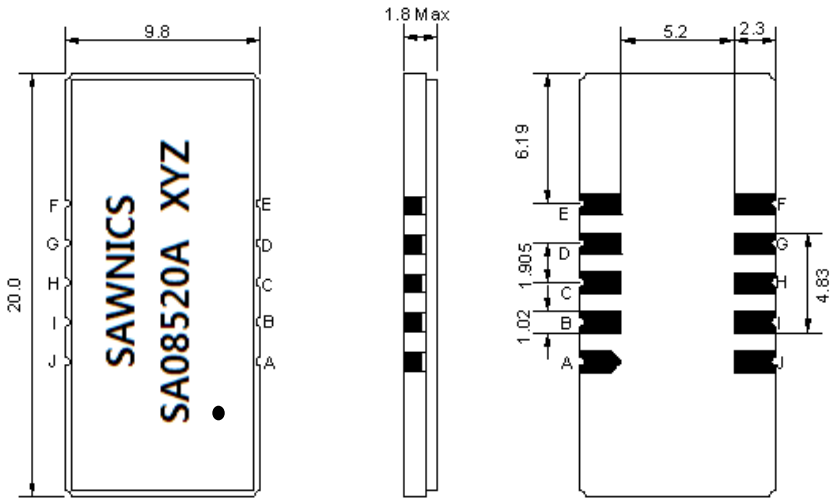
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Center Frequency (Fo)	MHz	-	85.1	-
Insertion Loss at Fo	dB	-	23.0	25.0
Group Delay Variation (Fo±9.22MHz)	ns	-	35	80
Absolute Delay	us	-	1.95	-
Temperature Coefficient	ppm/°C	-	-72	-
Passband Ripple (Fo±9.22MHz)	dB	-	0.55	0.95
Bandwidth at -1dB	MHz	-	19.69	-
Bandwidth at -3dB	MHz	19.90	20.02	-
Bandwidth at -25dB	MHz	-	21.12	21.20
Bandwidth at -40dB	MHz	-	21.39	-
Ultimate Rejection	dB	50	52	-

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.

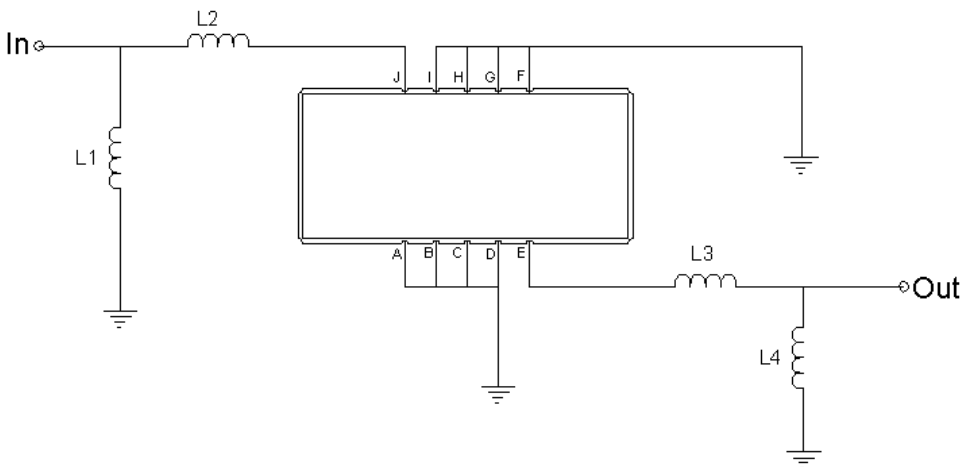
❒ Package Dimensions



① SAWNICS: Brand
② SA08520A: 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

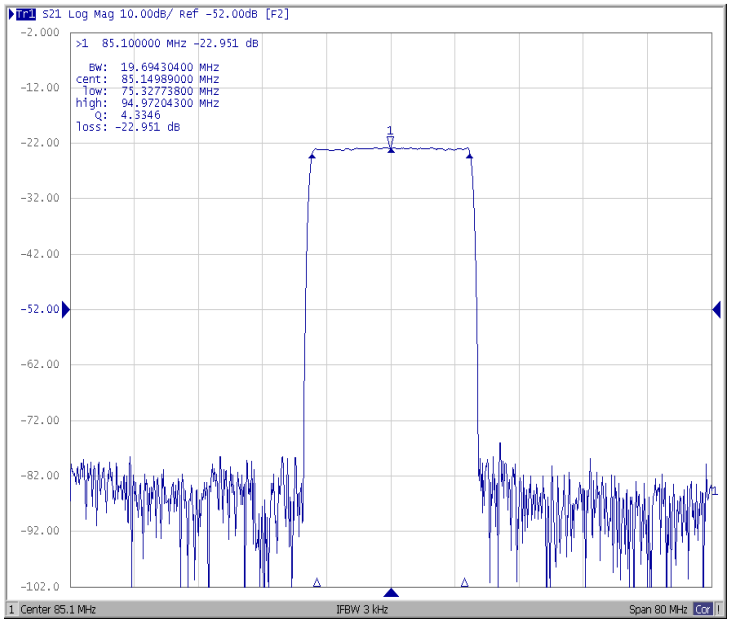


Test Fixture & Values	
Input	L1=470 nH, L2=56 nH
Output	L3=56 nH, L4=470 nH
Source/Load Impedance	50 Ω

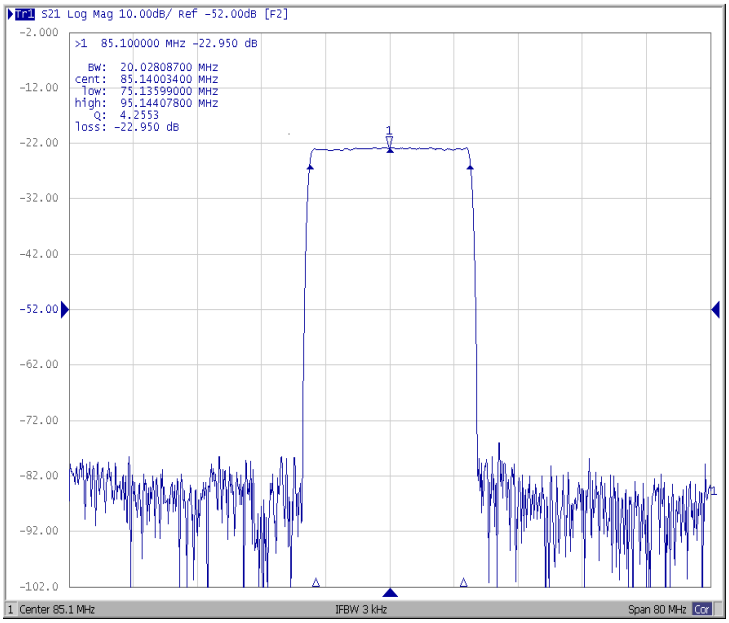
❒ Frequency Characteristics

Frequency Response

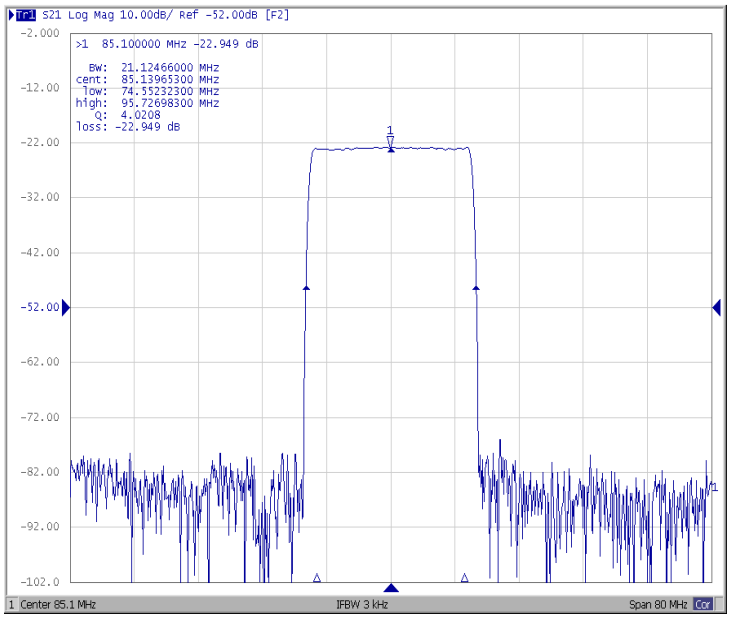
Bandwidth at –1.0 dB



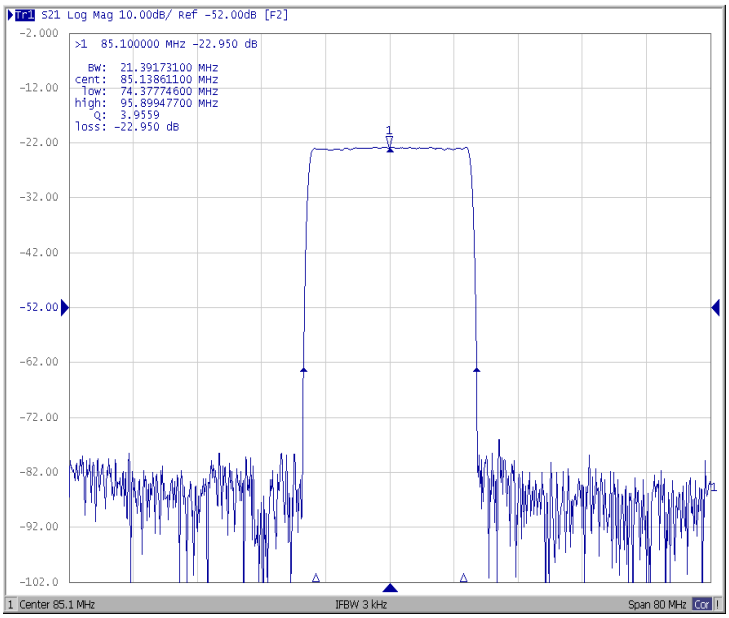
Bandwidth at –3.0 dB



Bandwidth at –25.0 dB



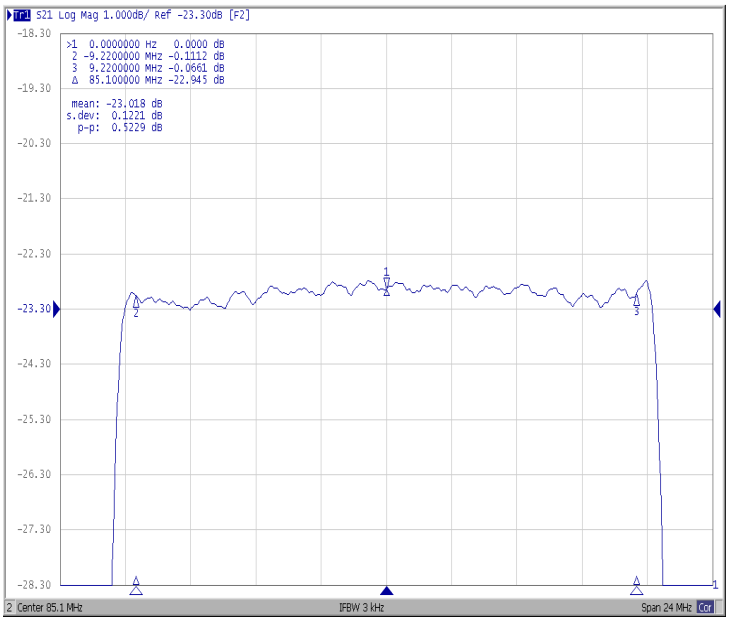
Bandwidth at –40.0 dB



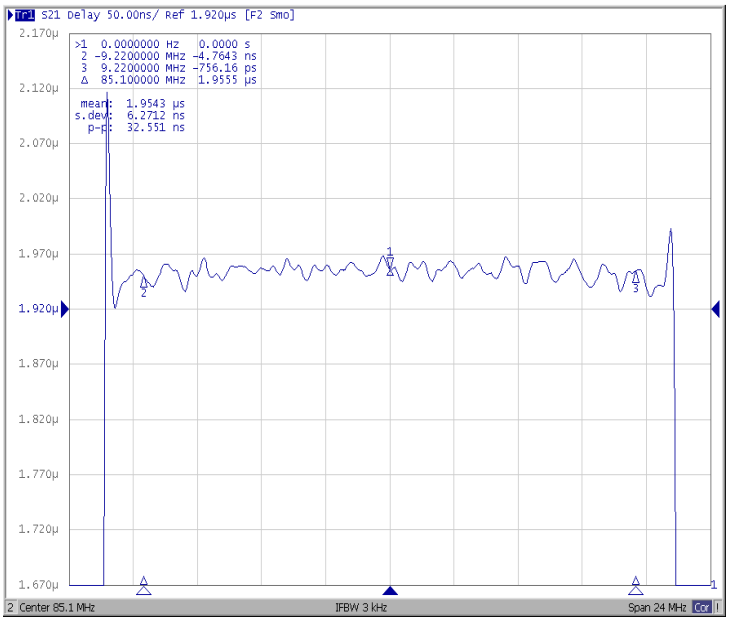
❒ Frequency Characteristics

Frequency Response

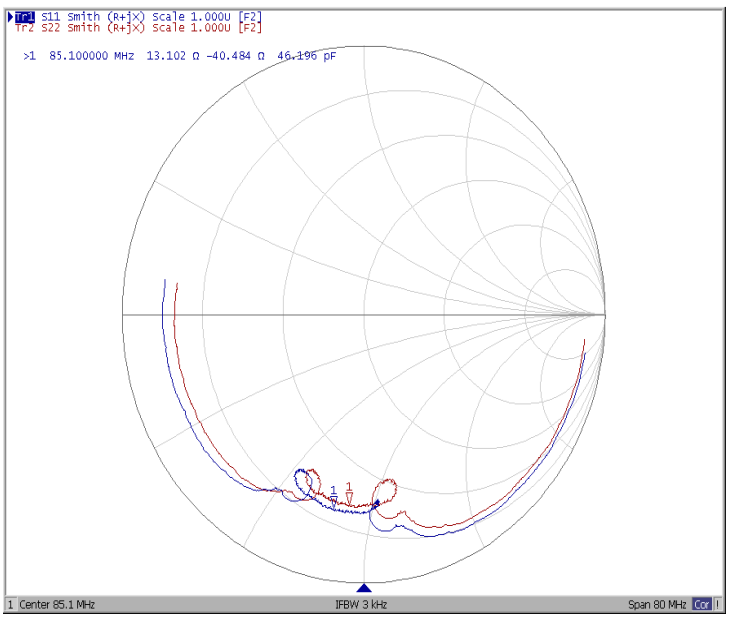
Ripple Variation Fo±9.22MHz



Group Delay Variation Fo±9.22MHz



Smith Chart



VSWR