



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

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RFSP2TA0020GUSB

Absorptive Coaxial SP2T Switch 0.8 - 20GHz



Features

- Wide Band Operation 0.8-20GHz
- USB Controlled and Powered.
- Low Insertion Loss and High Isolation
- Customization available upon request
- Control SW included.

Typical Applications

- Automated Test
- Aerospace and military applications



Electrical Specifications, TA = +25 °C, USB Powered

Description	PN: RFSP2TA0020GUSB									
	SP2T Absorptive Switch									
	Low Power Cold Switching									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.8-8			8-12			12-20			GHz
Insertion Loss		1.6	1.8		2.2	2.4		2.7	3.2	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	65	70		60	65		60	65		dB
Input VSWR		1.6	2		1.6	2		1.6	2	:1
Output VSWR		1.6	2		1.6	2		1.6	2	:1
RF Input power (CW)			30			30			30	dBm
DC Power Dissipation		0.55			0.55			0.55		W
0.1dB Compression Point (P 0.1dB)		30			30			30		dBm
IIP3		55			55			55		dBm
Weight	1.06									ounces
Impedance	50									Ω
Bias Current	110									mA
Control Interface	USB 2.0 (Control Cable Included)									
Switching Speed	200~300 ms									
Input / Output Connectors	SMA-Female									
Finishing	Nickel Plated									
Material	Aluminum									

Absorptive Coaxial Single Pole Double Throw Switch 0.8 - 20GHz



Absolute Maximum Ratings

RF Input Power	+30dBm
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Ordering Information

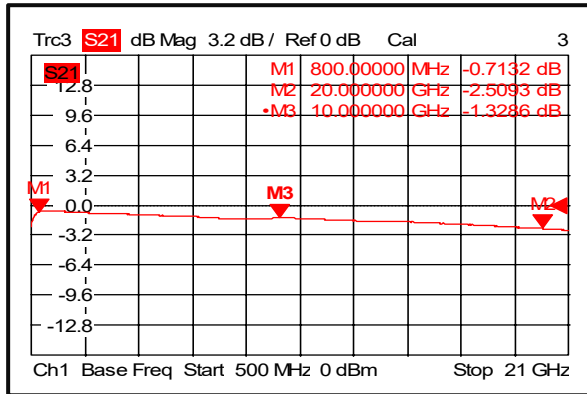
Part No.	ECCN	Description
RFSP2TA0020GUSB	EAR99	SP2T 0.8-20GHz PIN Diode Switch

Environmental Specifications

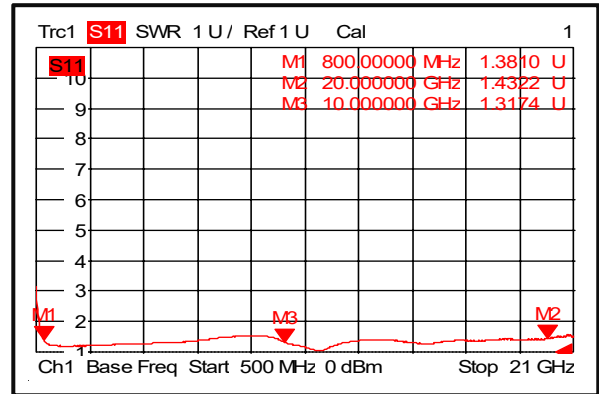
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-45 ~ +85
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Shock	20G for 11msec half sine wave, 3 axis both directions

Typical Performance Plots

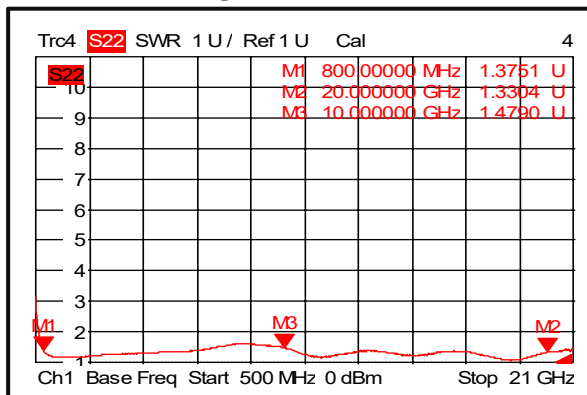
Insertion Loss @+25°C



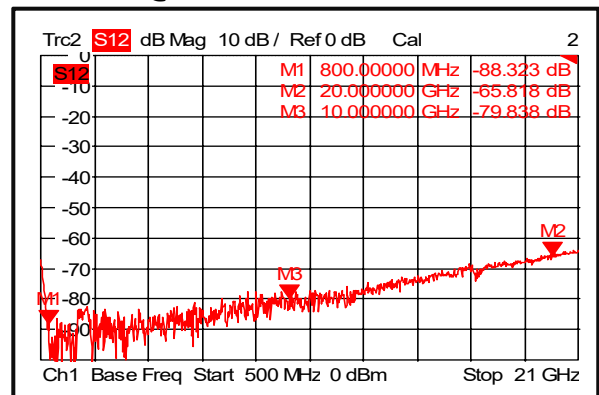
Input VSWR @+25°C



Output VSWR @+25°C

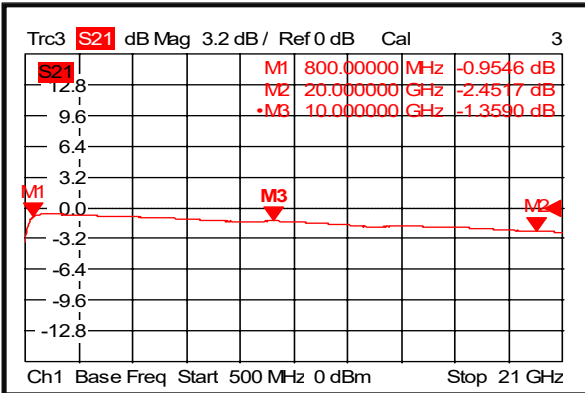


Isolation @+25°C

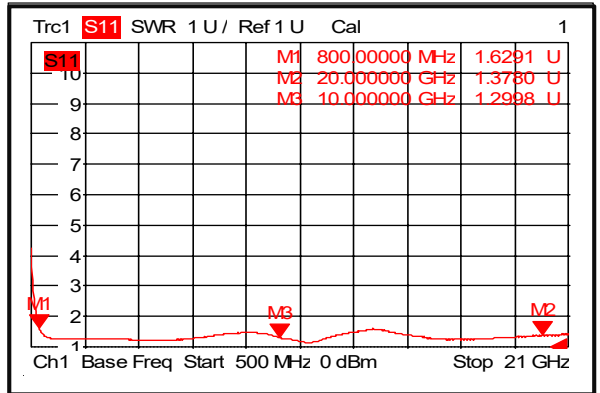




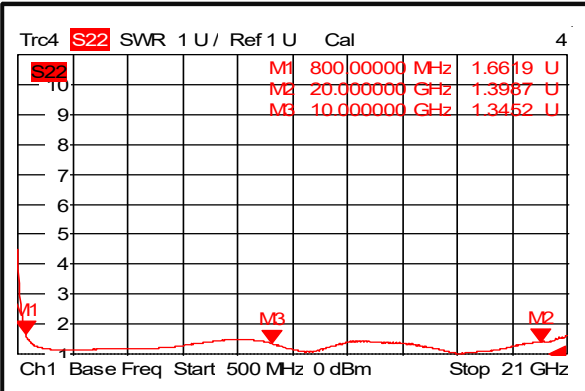
Insertion Loss @-45°C



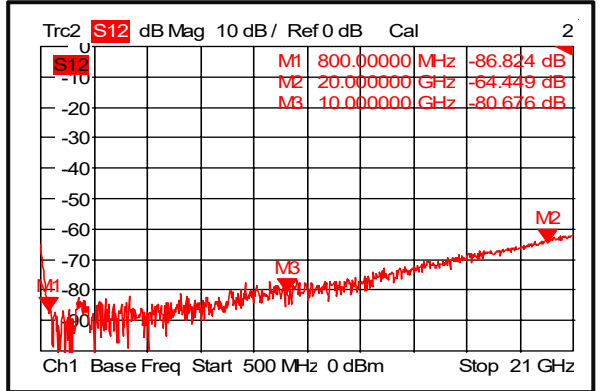
Input VSWR @-45°C



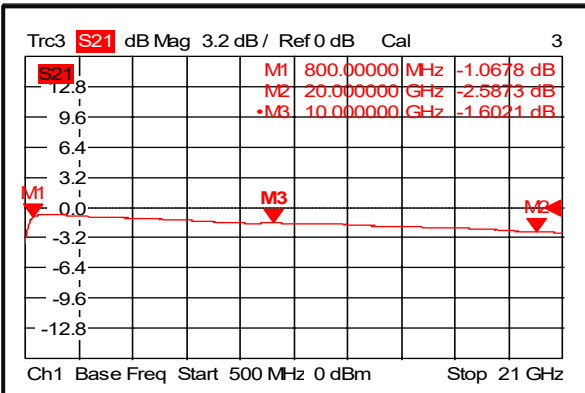
Output VSWR @-45°C



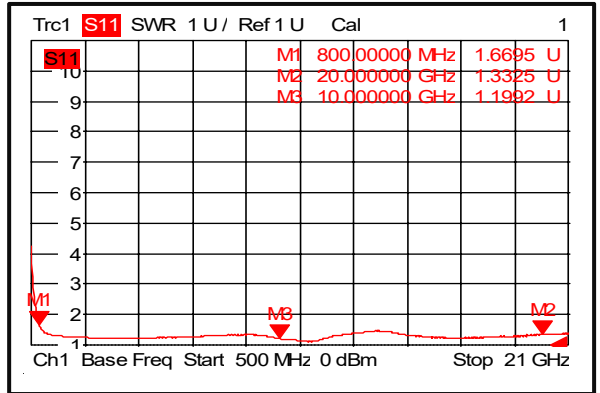
Isolation @-45°C



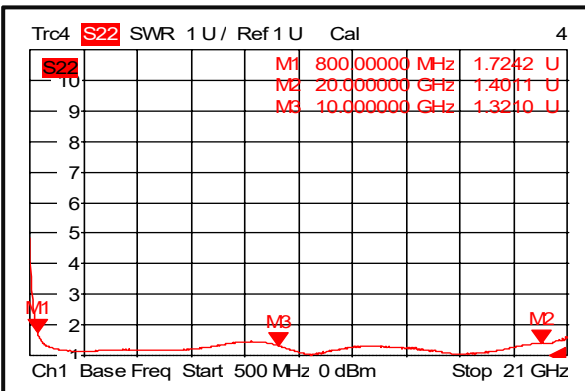
Insertion Loss @+85°C



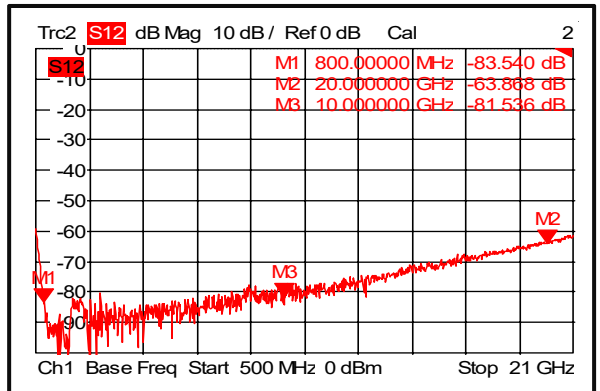
Input VSWR @+85°C



Output VSWR @+85°C



Isolation @+85°C





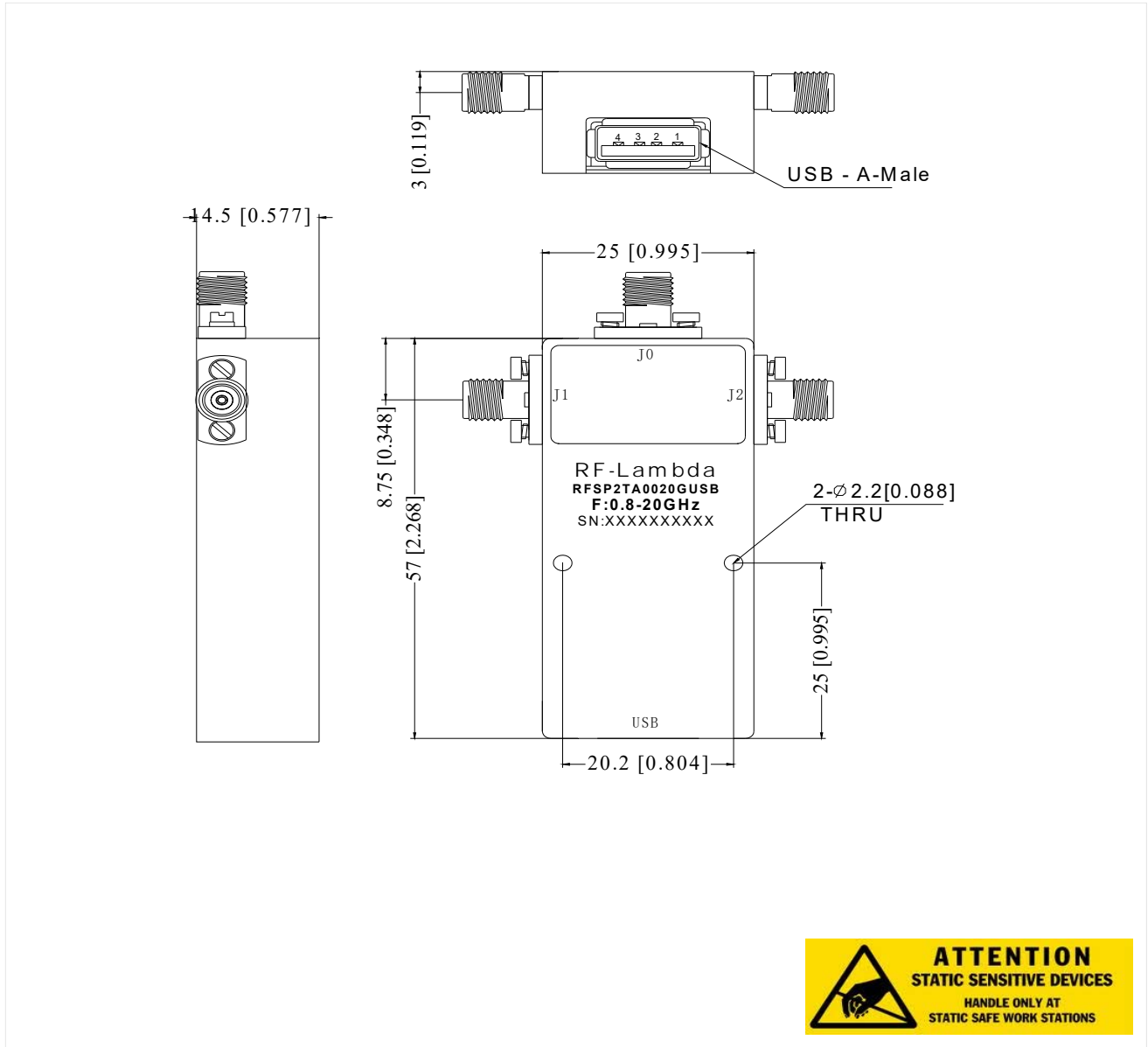
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Outline Drawing:

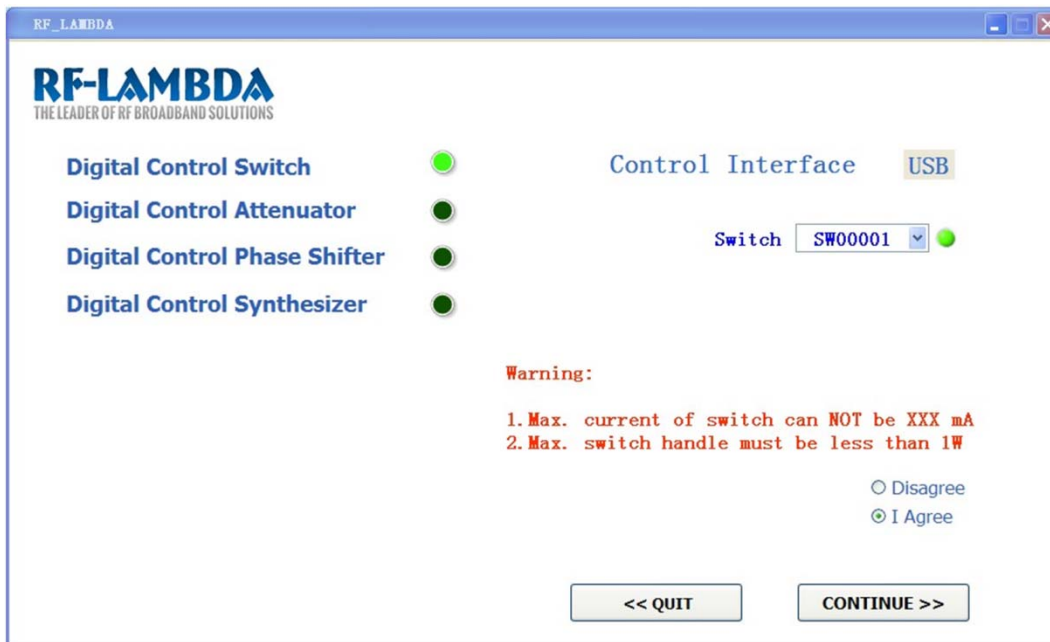
All Dimensions in mm [inches]



Absorptive Coaxial Single Pole Double Throw Switch 0.8 - 20GHz



Figure 1 (USB Control Panel)

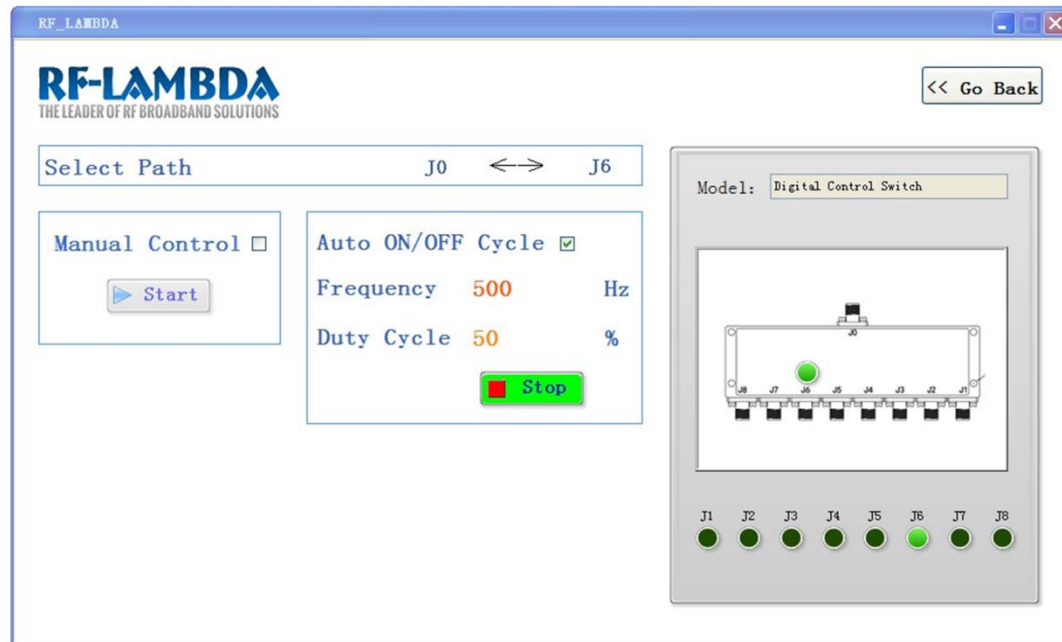
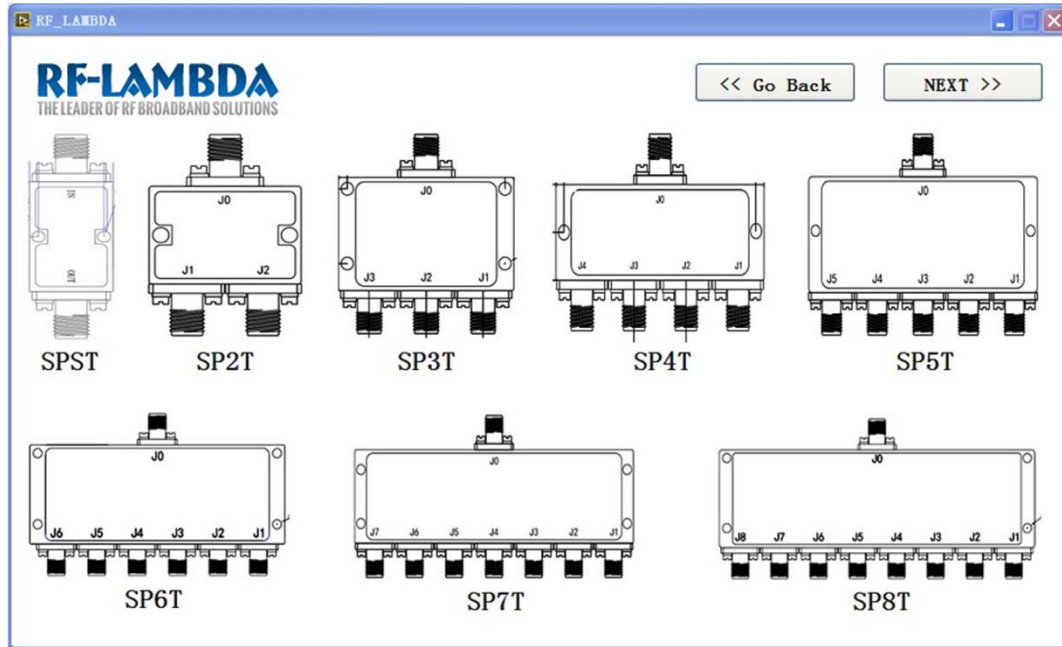




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