

Absorptive 0.5-4GHz Coaxial SPST Switch



Features

- Wide Band Operation 0.5-4GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument
- RF Microwave & VSAT
- Fiber Optics

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.5		2	2		4	GHz
Insertion Loss		0.7	1.0		1.0	1.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation (J0→J1)	80	85		80	85		dB
Input VSWR		1.3	1.5		1.3	1.5	: 1
Output VSWR		1.3	1.5		1.3	1.5	: 1
RF Input Power			30			30	dBm
DC Power Dissipation (CW)		0.3			0.3		W
0.1dB Compression Point (P0.1dB)		30			30		dBm
IIP3		45			45		dBm
Switching Speed			100 Max.				ns
Weight			0.5 Max.				ounces
Impedance			50				Ω
Bias Current (+5V / -5V)			80/50 Max.				mA
Input / Output Connectors			SMA-Female				
Finish			Gold Plated				
Material			Aluminum				
Sealing			Hermetically Sealed (Optional)				

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Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%
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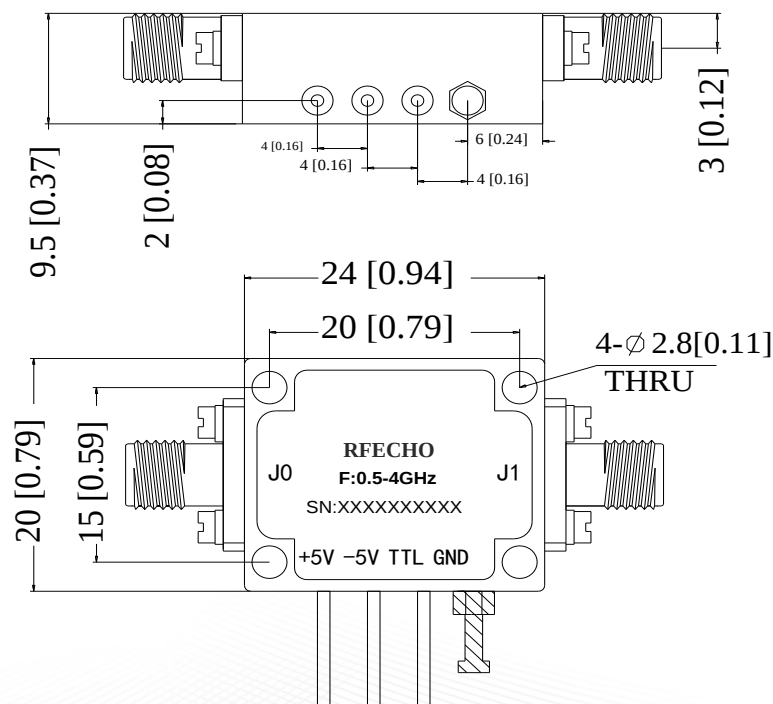
Truth Table

TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	OFF
1	ON
Control Pin Customization available upon request	

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

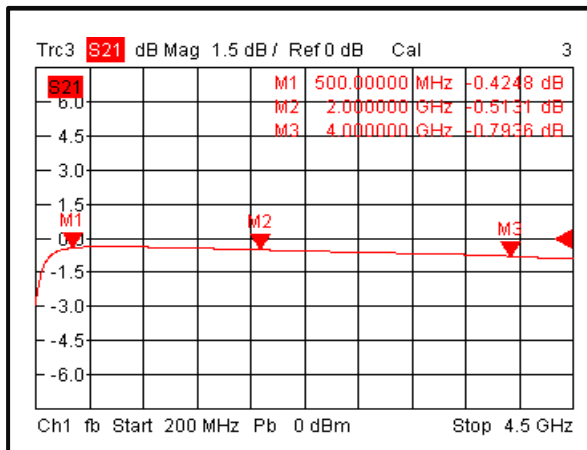
Product Dimensions



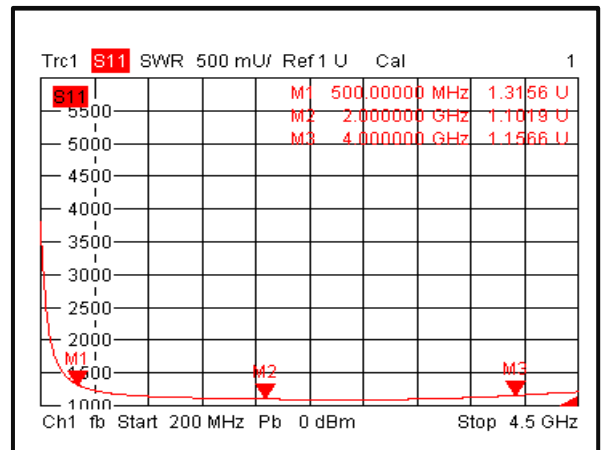
All Dimensions in mm (inches)

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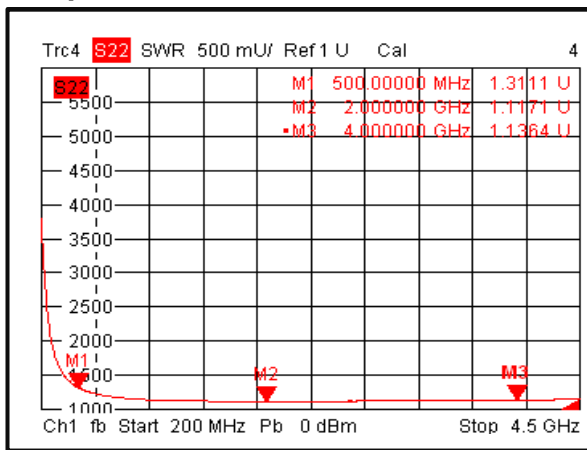
Insertion Loss@+25°C



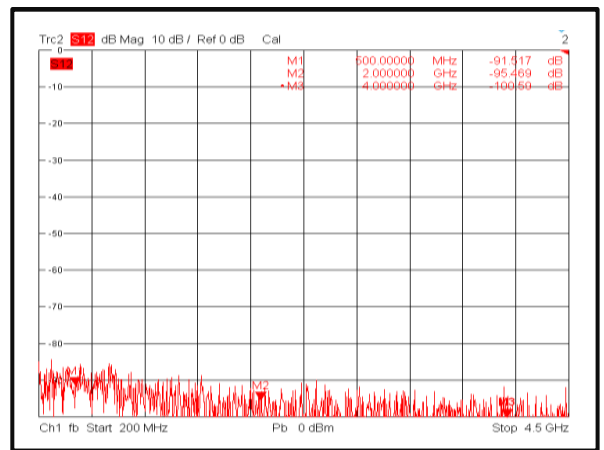
Input VSWR@+25°C



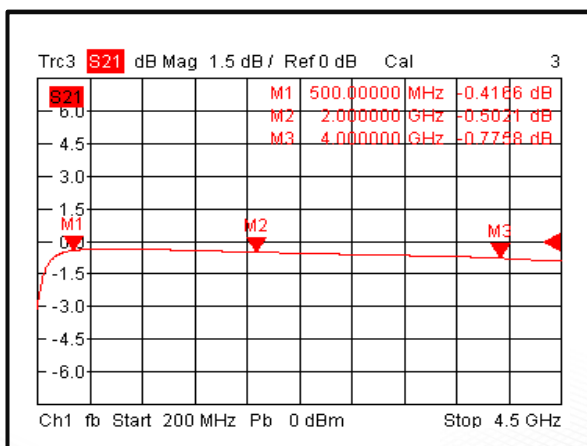
Output VSWR@+25°C



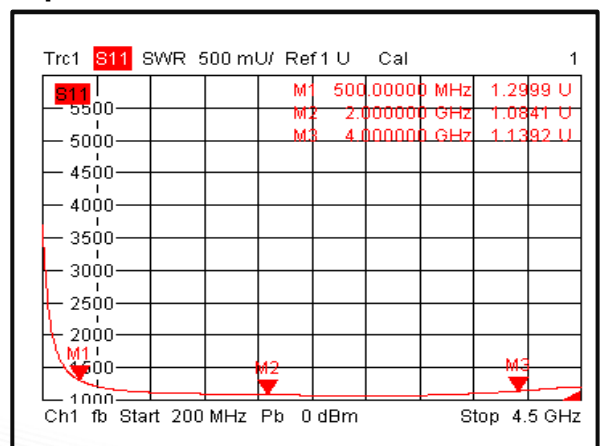
Isolation@+25°C



Insertion Loss@-40°C

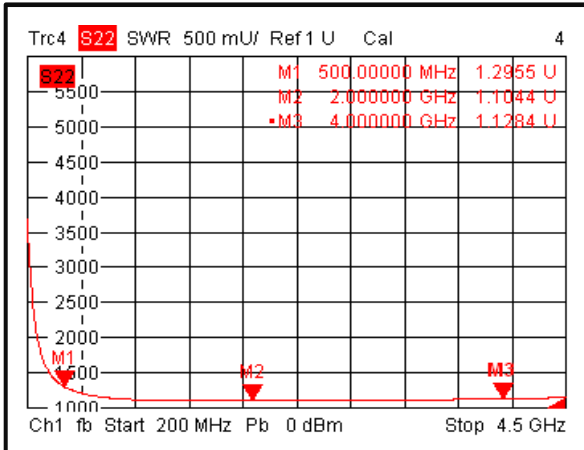


Input VSWR @-40°C

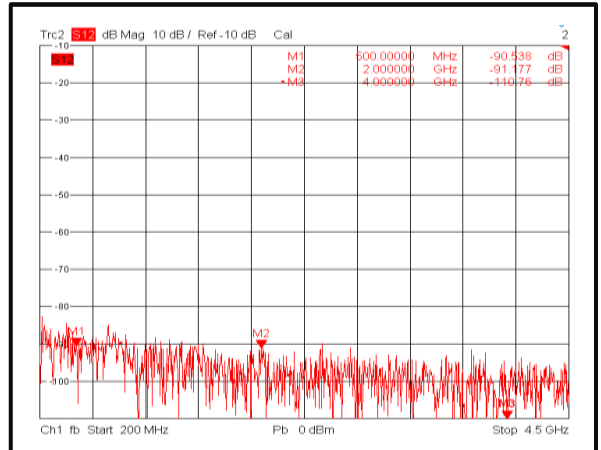


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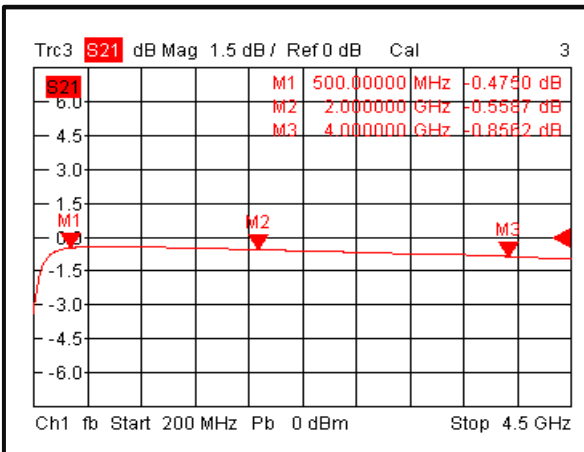
Output VSWR @-40°C



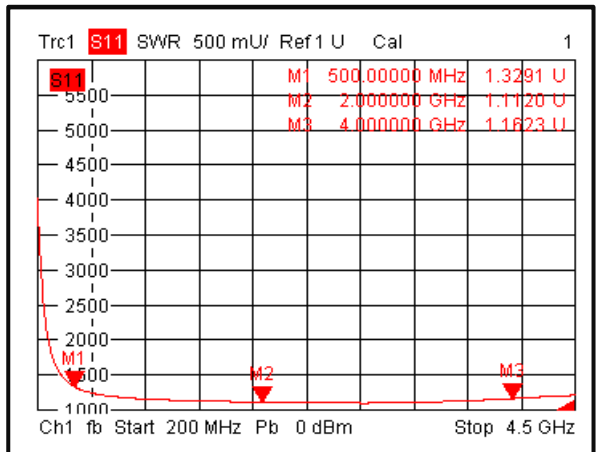
Isolation @-40°C



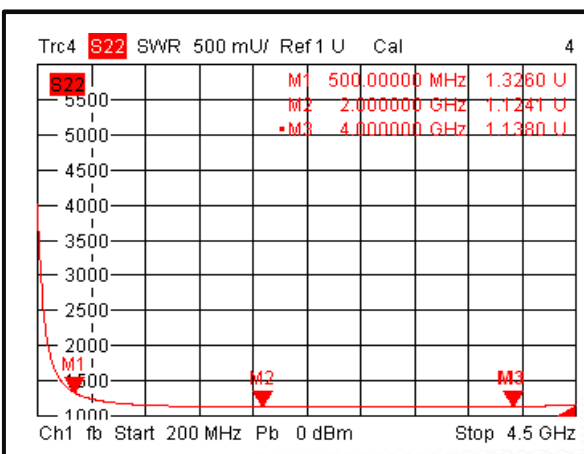
Insertion Loss @+85°C



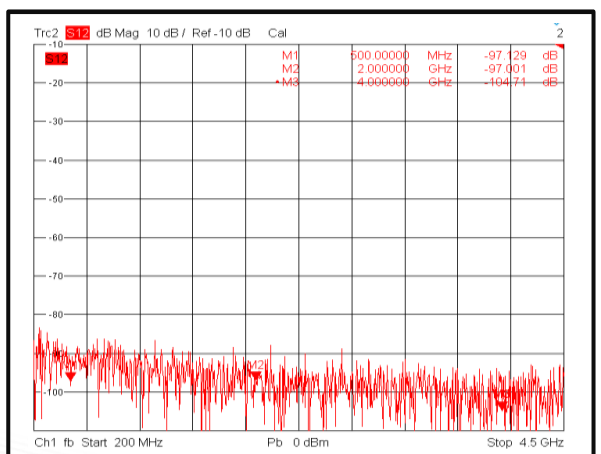
Input VSWR @+85°C



Output VSWR @+85°C

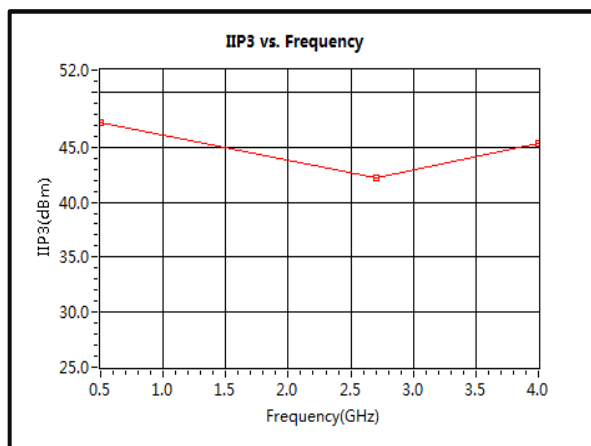


Isolation @+85°C

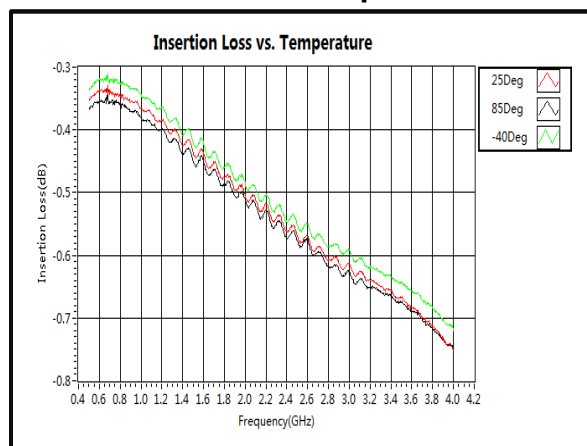


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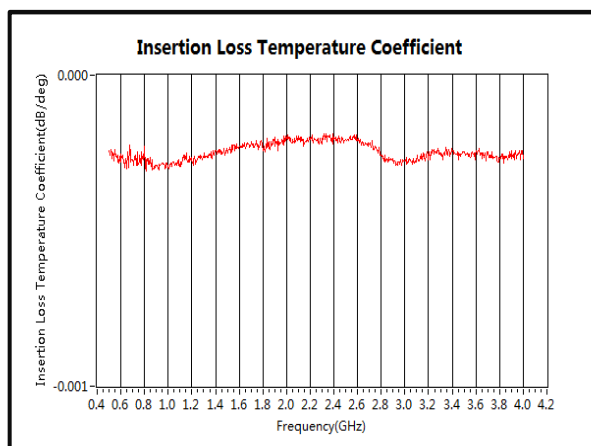
IIP3



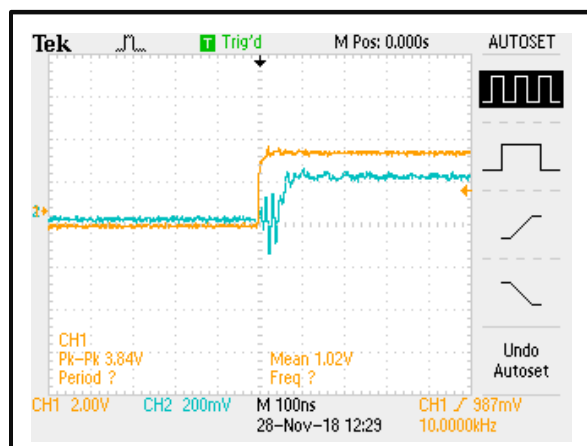
Insertion Loss vs. Temperature



Insertion Loss Temperature Coefficient



Switching Speed



Switching Speed

