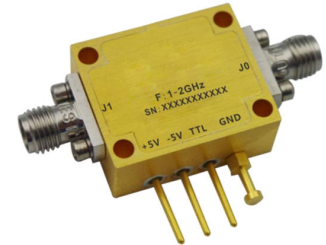




Reflective 1-2GHz Coaxial SPST Switch

Features

- Wide Band Operation 1-2GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Units
Frequency Range		1-2		GHz
Insertion Loss		0.5	0.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation (J0→J1)	80	90		dB
Input VSWR		1.2	1.3	: 1
Output VSWR		1.2	1.3	: 1
RF Input power			30	dBm
DC Power Dissipation		0.3		W
0.1dB Compression Point (P0.1dB)		30		dBm
IIP3		55		dBm
Switching Speed		100		ns
Weight		0.35		ounces
Impedance		50		Ω
Bias Current (+5V / -5V)		50/30		mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Biassing	+5V ± 10%/-5V ± 10%
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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

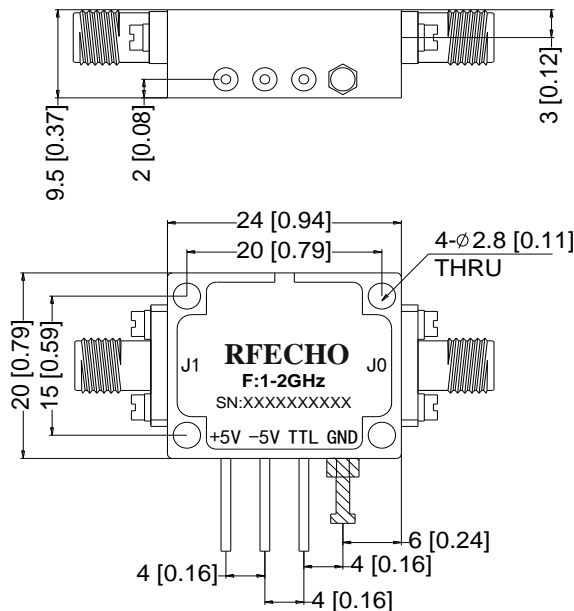
Ordering Information

Part No.	Description
DBSR0101000200A	SPST 1-2GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)

[X101]



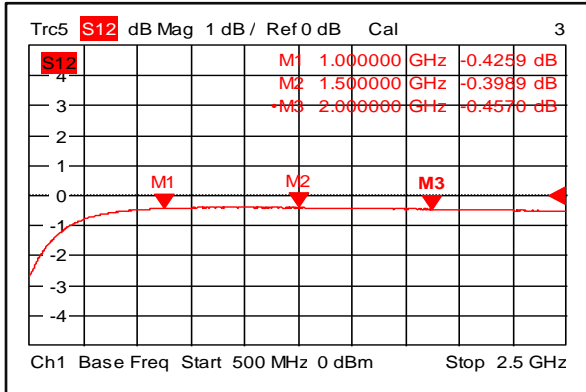
Notes:
J0: Absorptive Port
J1: Reflective port

Truth Table

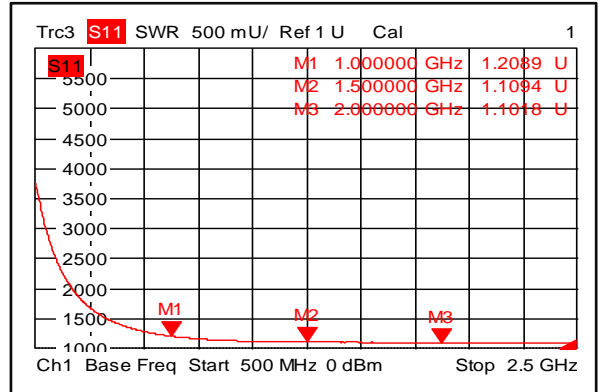
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
1	ON
0	OFF
Control Pin Customization available upon request	



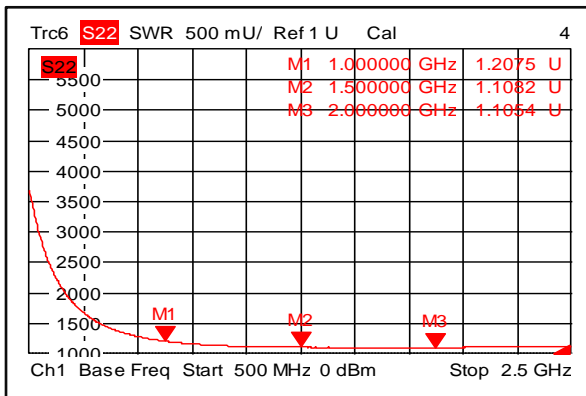
Insertion Loss



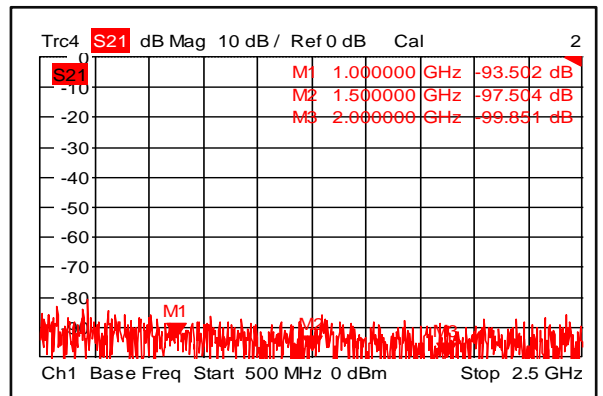
Input VSWR



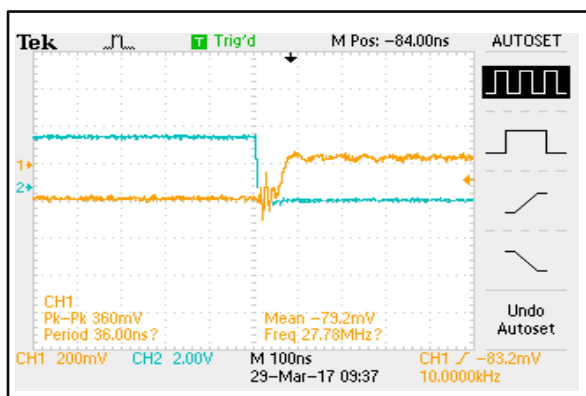
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

