



Reflective 0.001-1GHz Coaxial SP2T Switch

Features

- Wide Band Operation 0.001-1GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- High Power Cold Switching
- Customization available upon request



Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.001-0.1			0.1~1			GHz
Insertion Loss		0.5	1.5		0.8	1.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	65	80		65	80		dB
Input VSWR		1.2	1.5		1.2	1.5	: 1
Output VSWR		1.2	1.5		1.2	1.5	: 1
RF Input Power			32			37	dBm
DC Power Dissipation		0.6			0.6		W
0.1dB Compression Point (P0.1dB)		32			37		dBm
IIP3		50			50		dBm
Switching Speed		2	5		2	5	us
Weight	1.41						Ounces
Impedance	50						Ω
Bias Current (+5V)	110						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

Biasing	+5V±10%
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Ordering Information

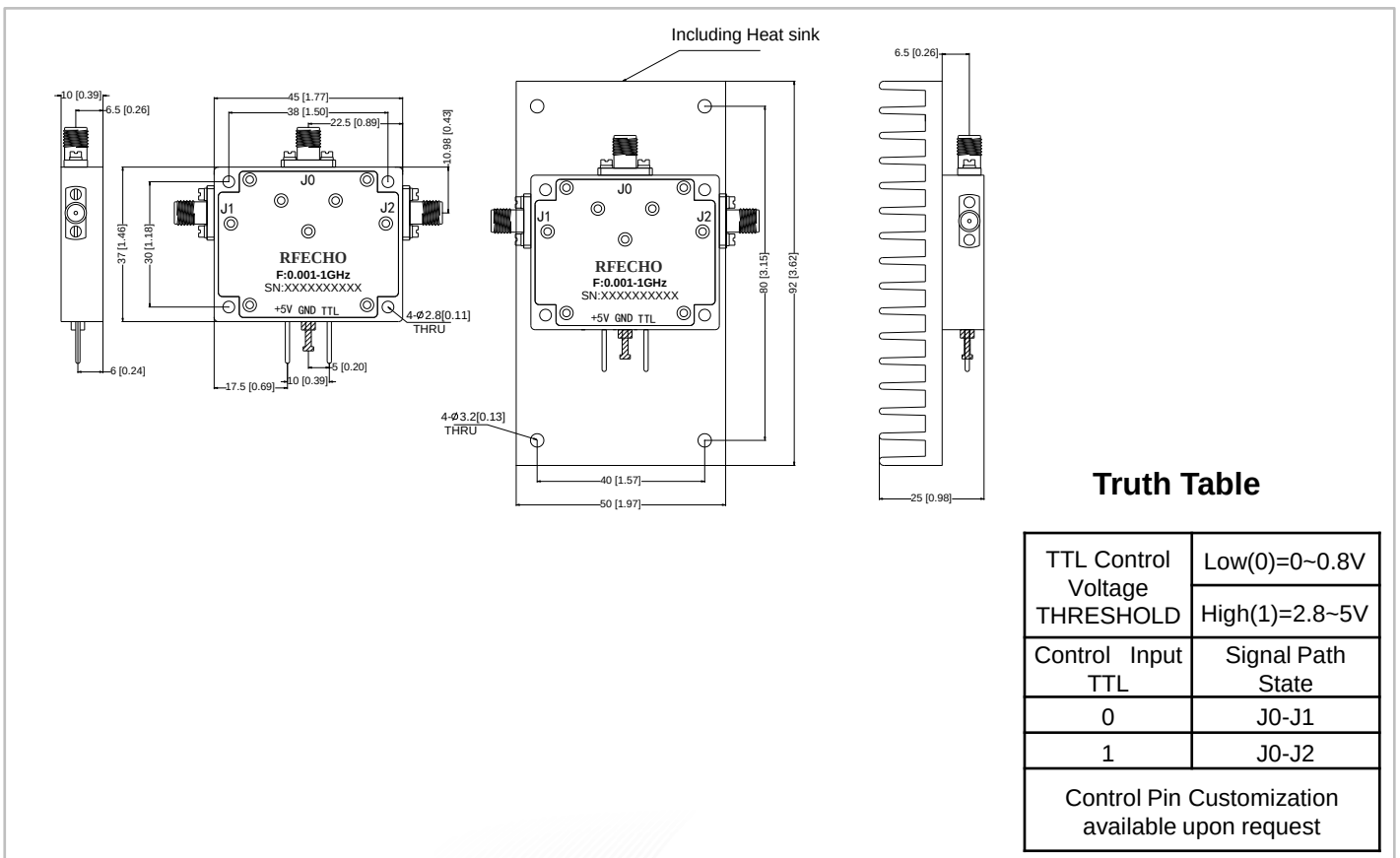
Part No.	Description
DBSR0200000100C	SP2T 0.001-1GHz PIN Diode Switch

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

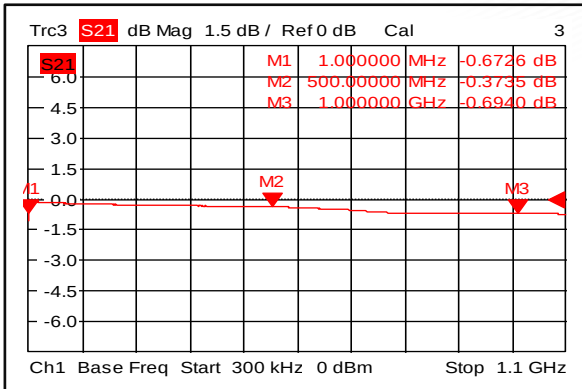
Outline Drawing:

All Dimensions in mm (inches)
Housing Tolerances ± 0.1 [0.004]

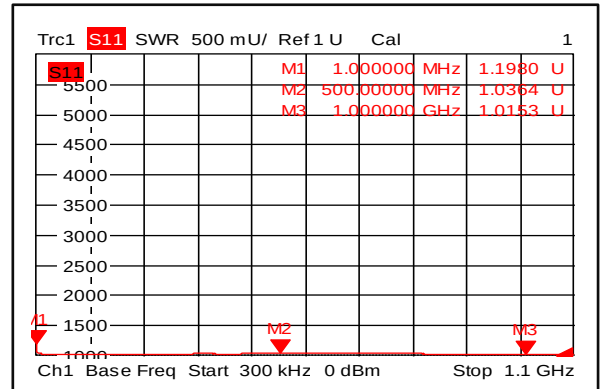




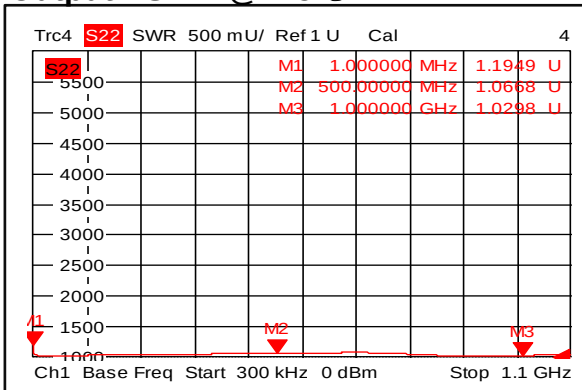
Insertion Loss @+25°C



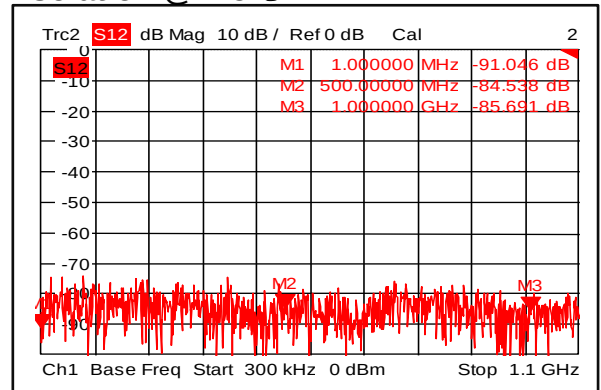
Input VSWR @+25°C



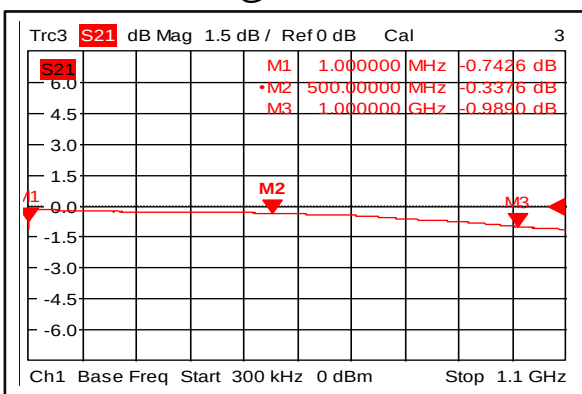
Output VSWR @+25°C



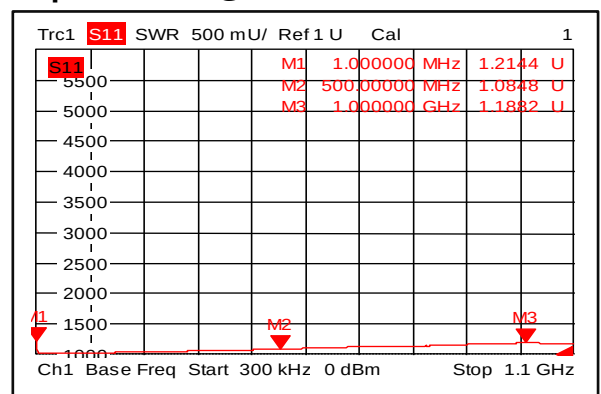
Isolation @+25°C



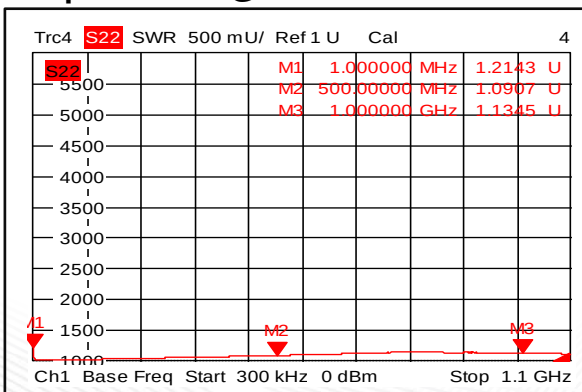
Insertion Loss @-40°C



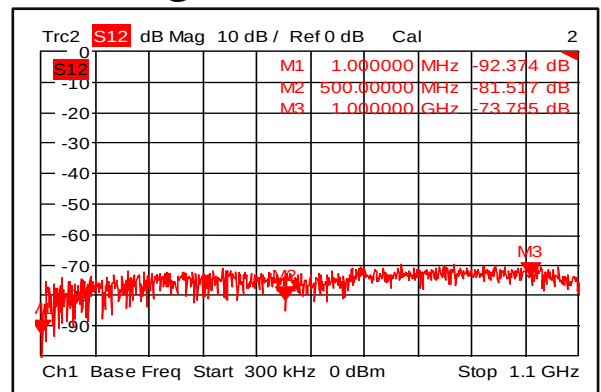
Input VSWR @-40°C



Output VSWR @-40°C

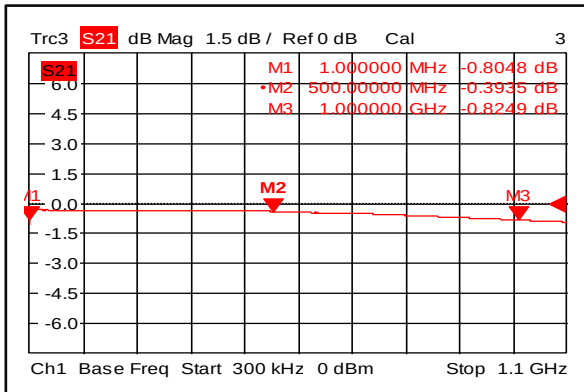


Isolation @-40°C

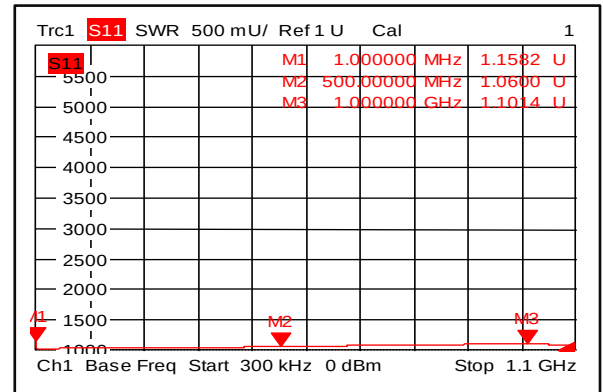




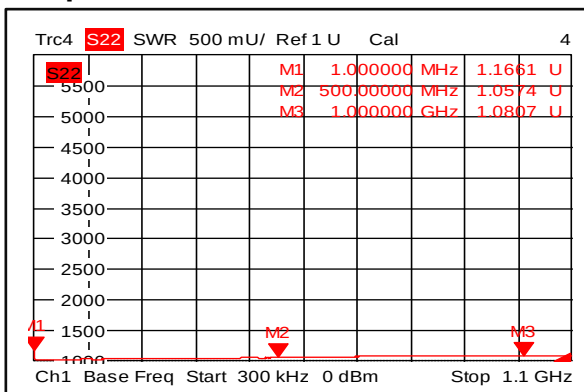
Insertion Loss @+85°C



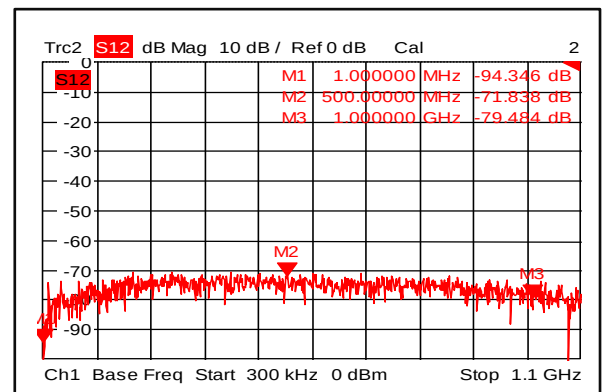
Input VSWR @+85°C



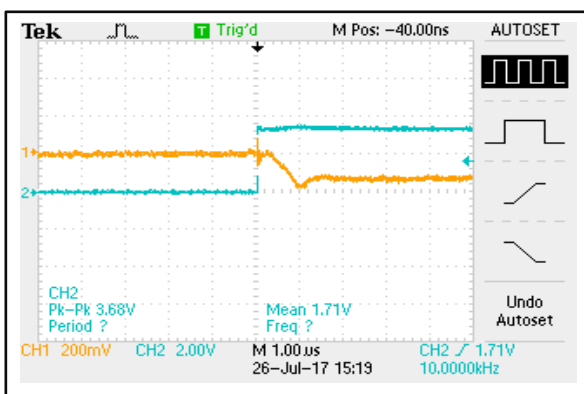
Output VSWR @+85°C



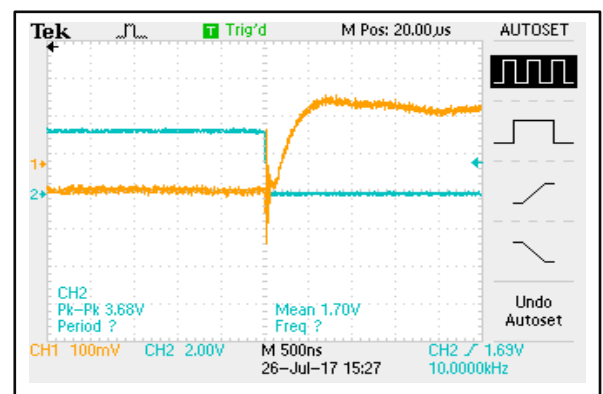
Isolation @+85°C



Switching Speed



Switching Speed





RFecho
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