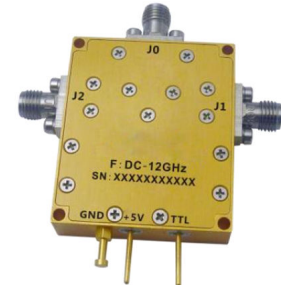




Reflective DC-12GHz Coaxial SP2T Switch

Features

- Ultra Wide Band Operation DC-12GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request
- High Power Cold Switching



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	DC-6			6-12			GHz
Insertion Loss		1.2	1.5		1.8	2.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	30	35		25	28		dB
Input VSWR		1.6	1.8		1.6	1.8	: 1
Output VSWR		1.6	1.8		1.6	1.8	: 1
RF Input power			44			44	dBm
DC Power Dissipation		0.5			0.5		W
0.1dB Compression Point (P0.1dB)		44			44		dBm
IIP3		50			50		dBm
Switching Speed		100	150		100	150	ns
Weight	1.3 Max.						ounces
Impedance	50						Ω
Bias Current (+5V)	100 Max.						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

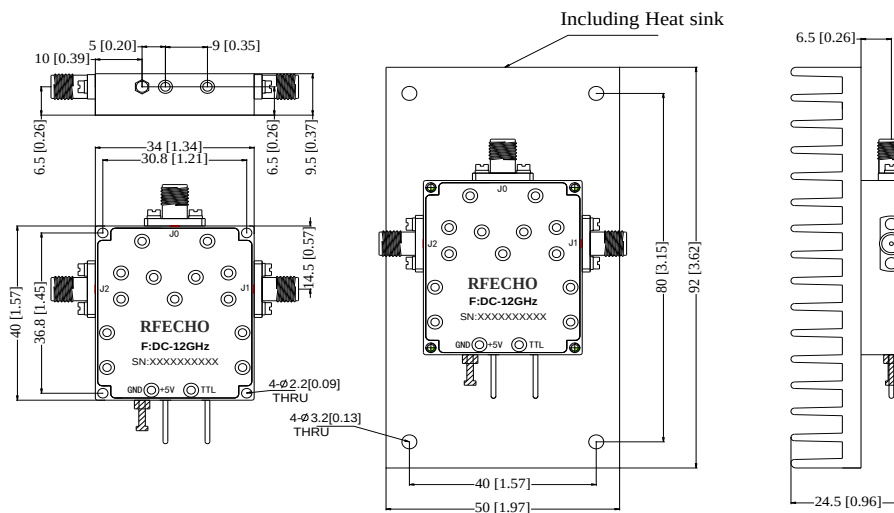
Part No.	Description
DBSR0200001200A	SP2TDC-12GHz PIN Diode Switch

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]

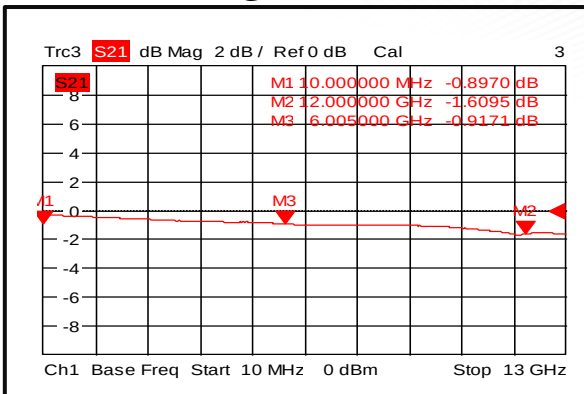


Truth Table

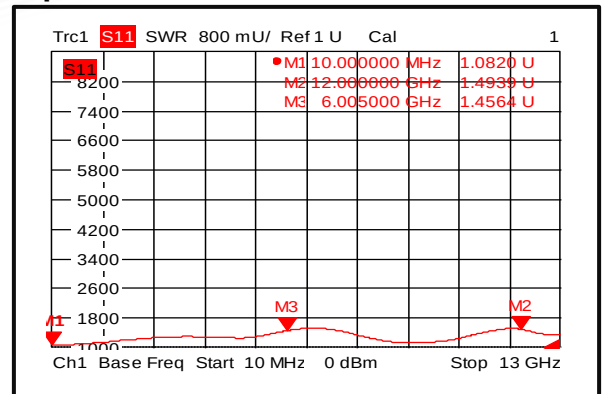
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
1	J0-J1
0	J0-J2
Control Pin Customization available upon request	



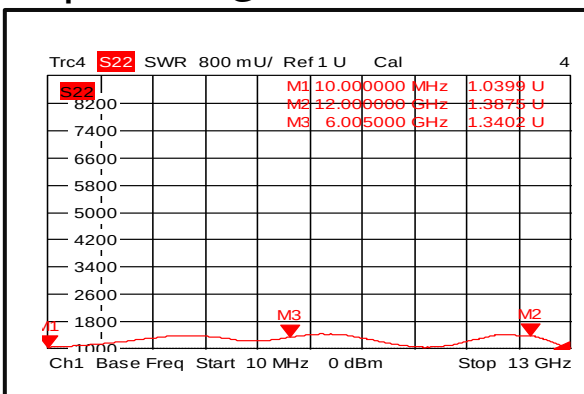
Insertion Loss @+25°C



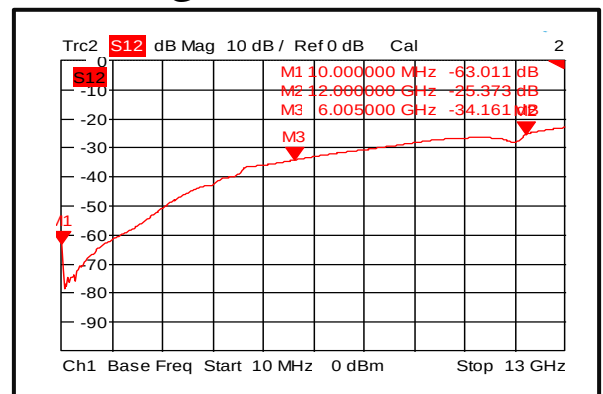
Input VSWR @+25°C



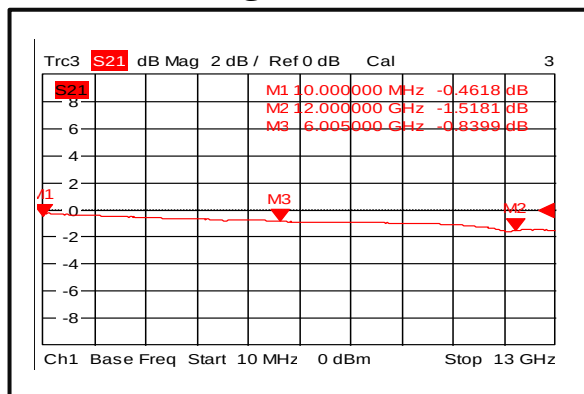
Output VSWR @+25°C



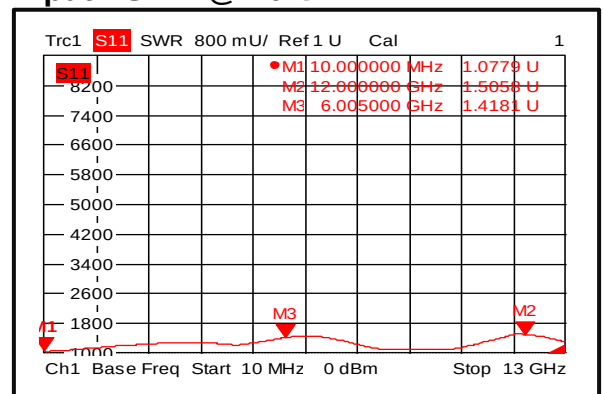
Isolation @+25°C



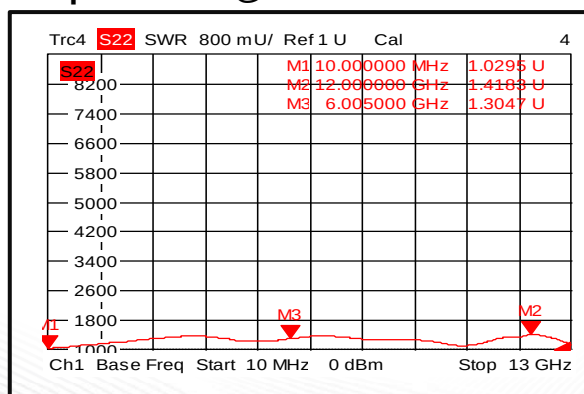
Insertion Loss @-40°C



Input VSWR @-40°C



Output VSWR @-40°C



Isolation @-40°C

