

Reflective 52-72GHz Coaxial SP2T Switch

Features

- Wide Band Operation 52-72GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation



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	52		69	69		72	GHz
Insertion Loss		3.5	5.0		5.3	6.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	30	37		30	37		dB
Input VSWR		2.2	3		2.2	3	: 1
Output VSWR		2.2	3		2.2	3	: 1
RF Input Power (CW)			20			20	dBm
DC Power Dissipation		0.3			0.3		W
0.1dB Compression Point (P0.1dB)			20			20	dBm
IIP3		50			50		dBm
Switching Speed			100			100	ns
Weight				0.71			ounces
Impedance				50			Ω
Bias Current (+5V / -5V)				50/20			mA
Input / Output Connectors				1.85mm-Female			
Finish				Gold Plated			
Material				Aluminum			
Sealing				Hermetically Sealed (Optional)			

Absolute Maximum Ratings

Biasing Voltage	+5V±10% / -5V±10%
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Environmental Specifications

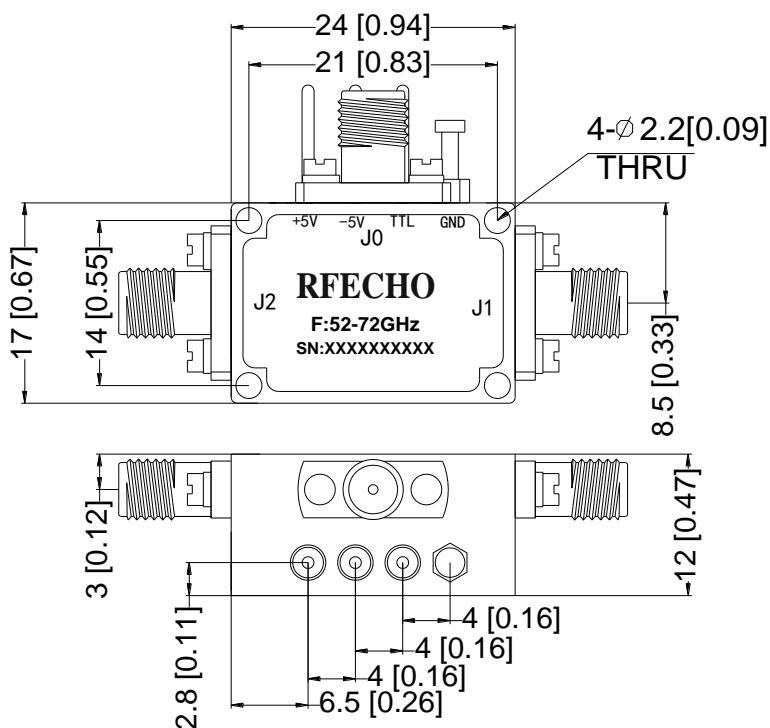
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

Part No.	Description
DBSR0252007200A	SP2T 52-72GHz PIN Diode Switch

Outline Drawing:

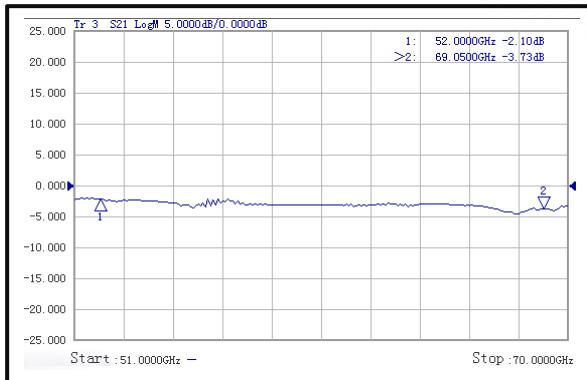
All Dimensions in mm (inches)



Truth Table

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

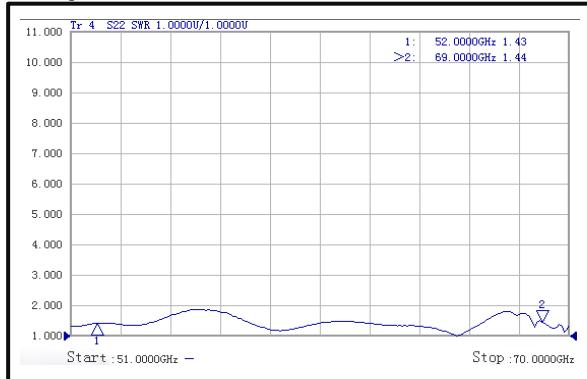
Insertion Loss@+25°C



Input VSWR@+25°C



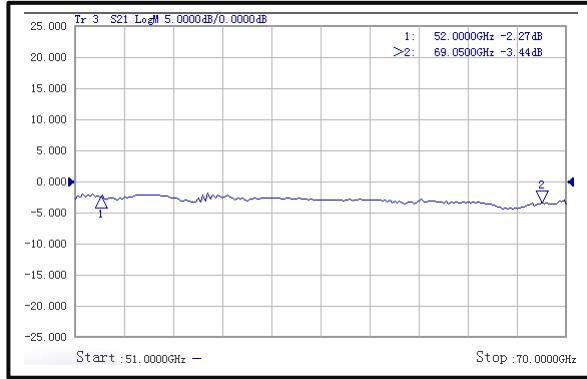
Output VSWR@+25°C



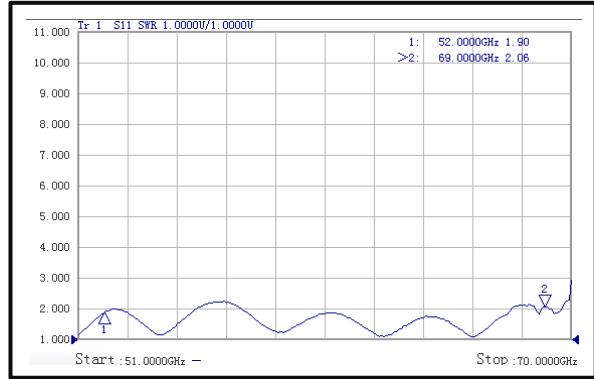
Isolation@+25°C



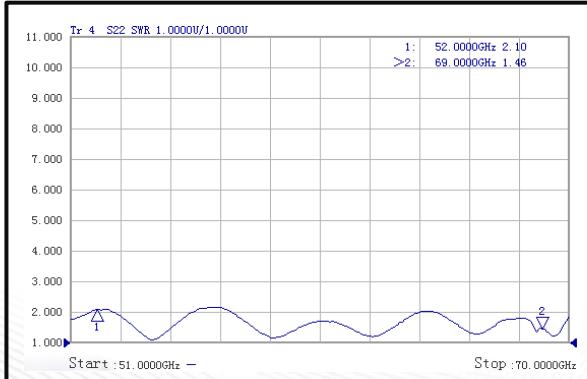
Insertion Loss@-40°C



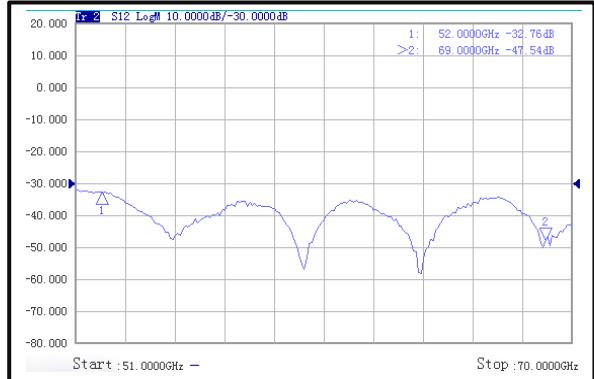
Input VSWR @-40°C



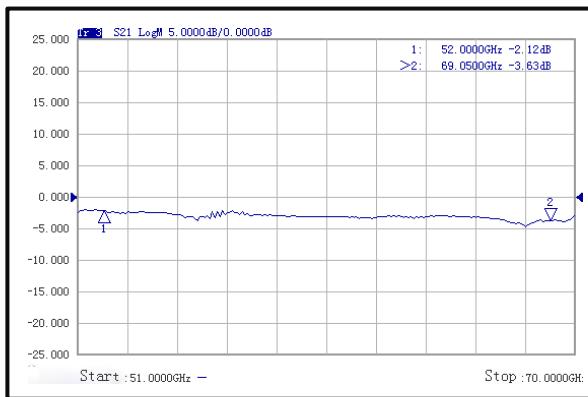
Output VSWR @-40°C



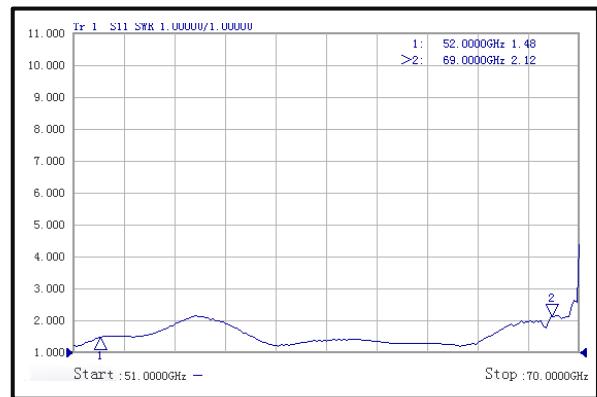
Isolation @-40°C



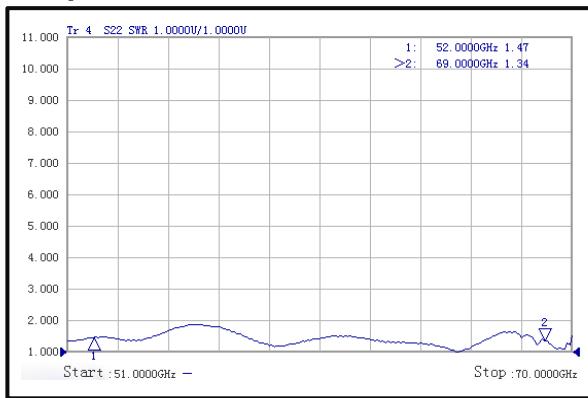
Insertion Loss@+85°C



Input VSWR@+85°C



Output VSWR@+85°C



Isolation@+85°C

