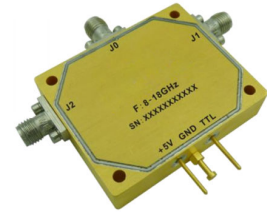


Hermetically Sealed Reflective Coaxial SP2T Switch 8-18GHz

Features

- Wide Band Operation 8-18GHz
- 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

Parameter	Min.	Typ.	Max.	Units
Frequency Range	8-18			GHz
Insertion Loss		2.5	3.2	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	@8-12GHz	48	53	dB
	@12-18GHz	35	38	dB
Input VSWR		1.4	2.0	: 1
Output VSWR		1.4	2.0	: 1
RF Input Power (1us Pulse width , 5% duty cycle)			150	W
DC Power Dissipation		1		W
0.1dB Compression Point (P 0.1dB)		39		dBm
IIP3		55		dbm
Switching Speed		250	350	ns
Weight	1.41			Ounces
Impedance	50			Ω
Bias Current (+5V)	200			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Laser Welded)			



Absolute Maximum Ratings

Biassing	+5V±10%
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Ordering Information

Part No.	Description
DBSR0208001800A	SP2T 8-18GHz PIN Diode Switch

Outline Drawing:

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

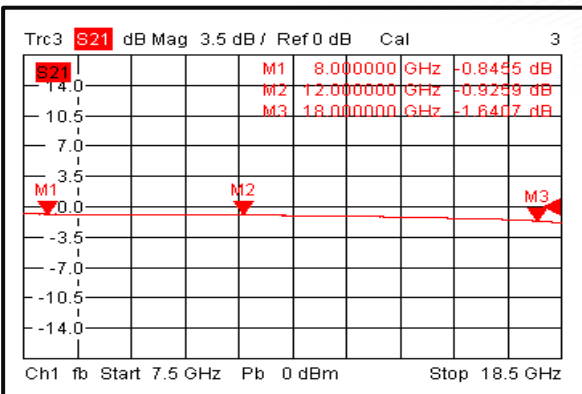
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	

Environmental Specifications

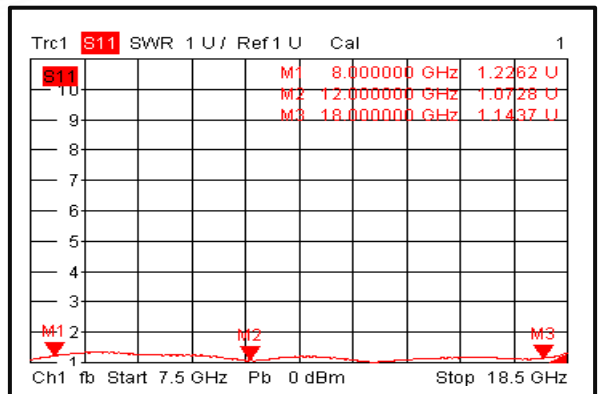
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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



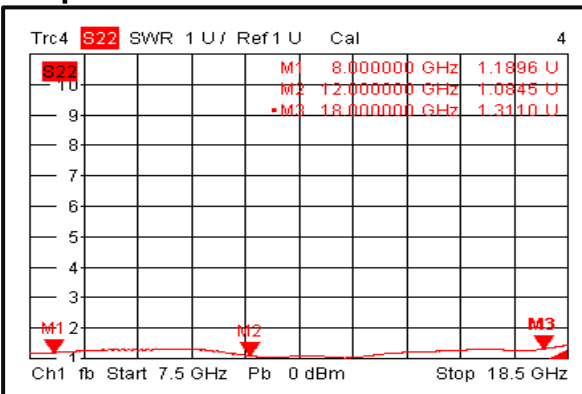
Insertion Loss @+25°C



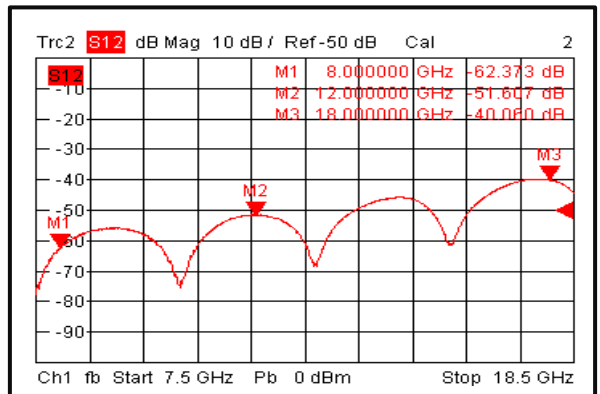
Input VSWR @+25°C



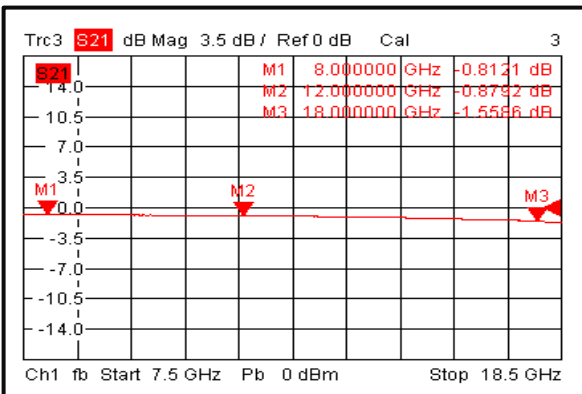
Output VSWR @+25°C



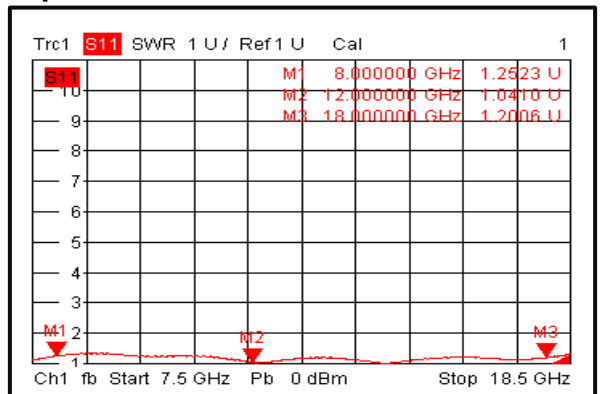
Isolation @+25°C



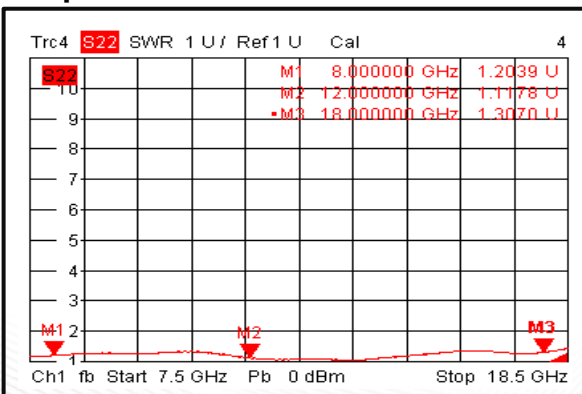
Insertion Loss @-40°C



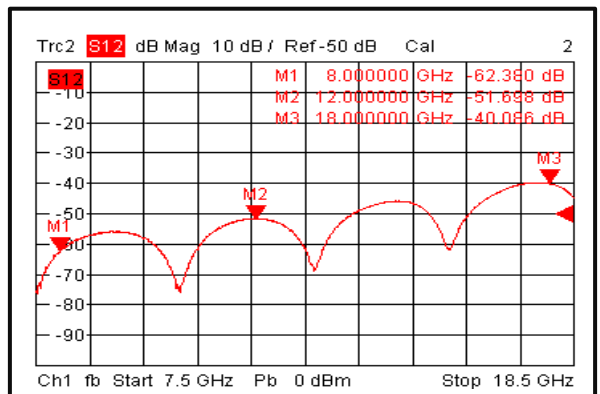
Input VSWR @-40°C



Output VSWR @-40°C

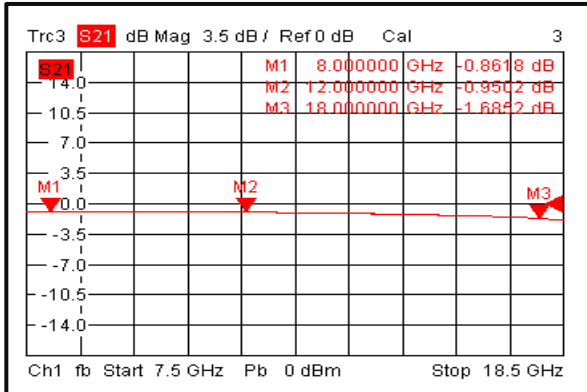


Isolation @-40°C

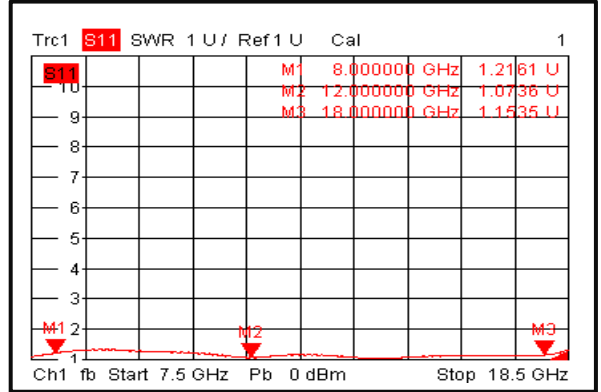




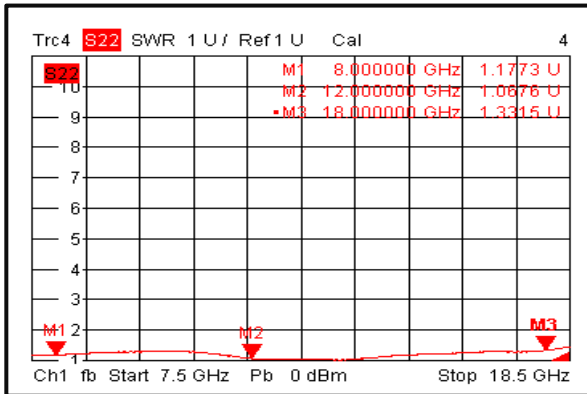
Insertion Loss @+85°C



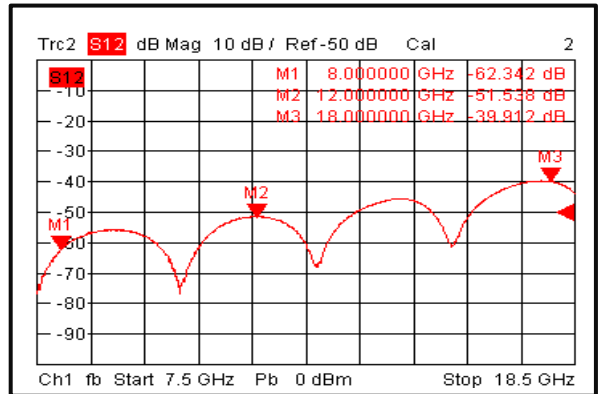
Input VSWR @+85°C



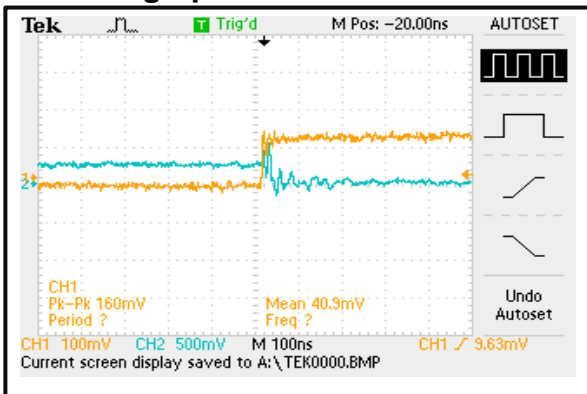
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

