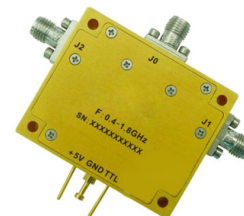




Reflective 0.4-1.8GHz Coaxial SP2T Switch

Features

- Wide Band Operation 0.4-1.8GHz
- TTL compatible driver include
- 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	Units
Frequency Range	0.4~1.8			GHz
Insertion Loss		0.5	0.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	70	85		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input Power			37	dBm
DC Power Dissipation		0.6		W
0.1dB Compression Point (P0.1dB)		37		dBm
IIP3		55		dBm
Switching Speed		100	300	ns
Bias Current (+5V)	200			mA
Weight	1.41			Ounces
Impedance	50			Ω
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
DBSR0200400180A	SP2T 0.4-1.8GHz PIN Diode Switch

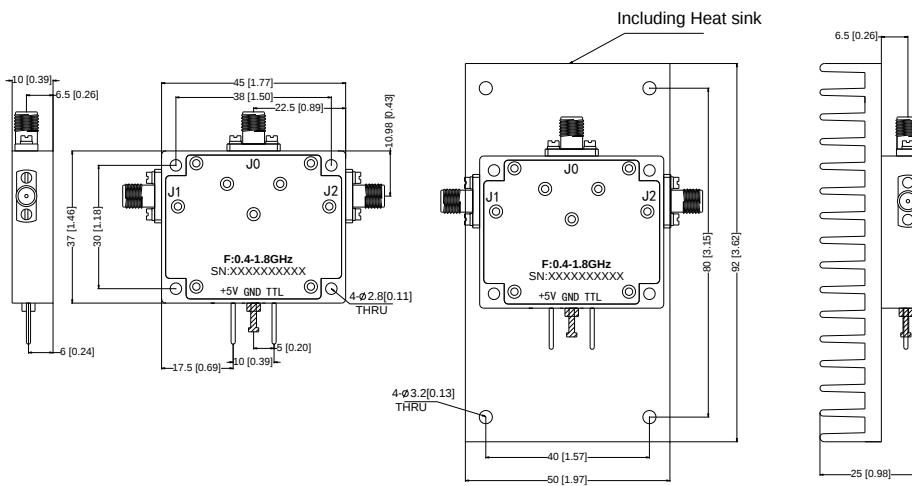
Environmental Specifications

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]

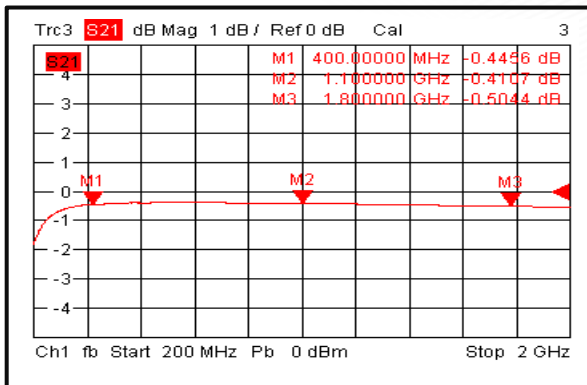


Truth Table

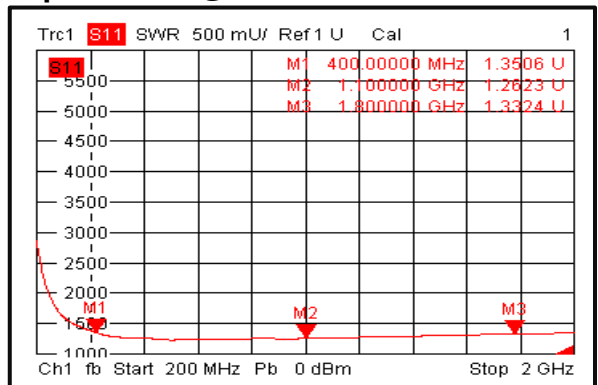
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	



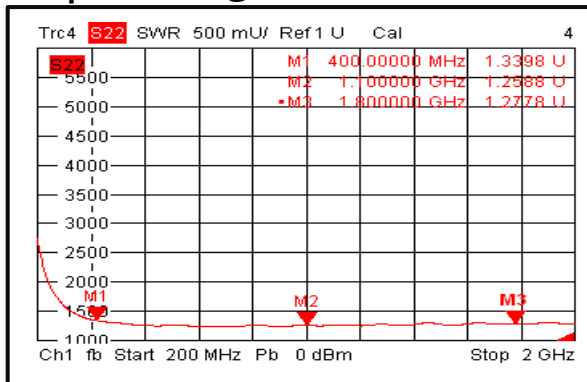
Insertion Loss@+25°C



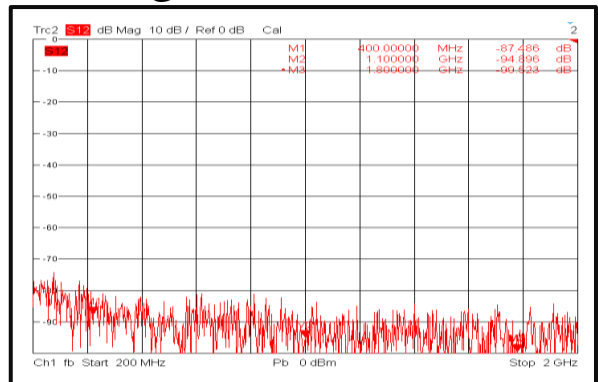
Input VSWR@+25°C



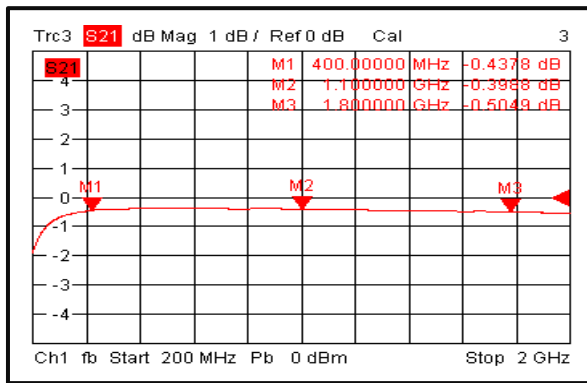
Output VSWR@+25°C



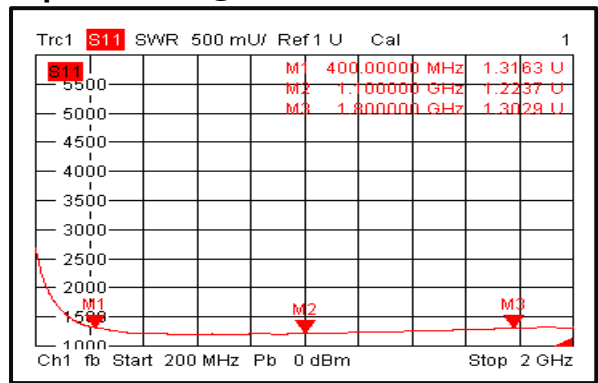
Isolation@+25°C



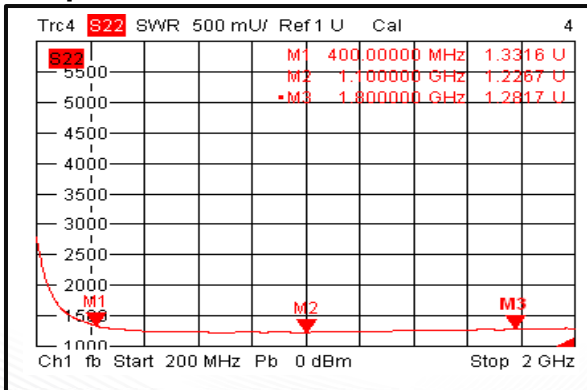
Insertion Loss@-40°C



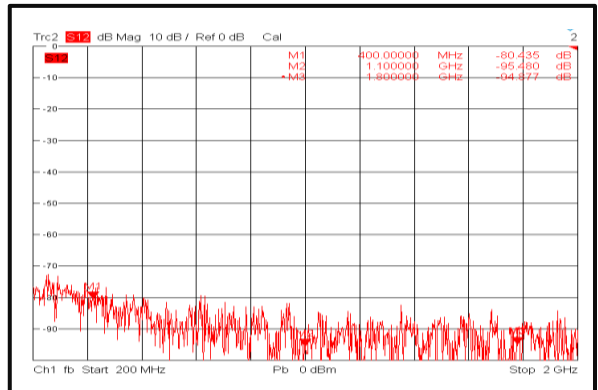
Input VSWR @-40°C



Output VSWR @-40°C

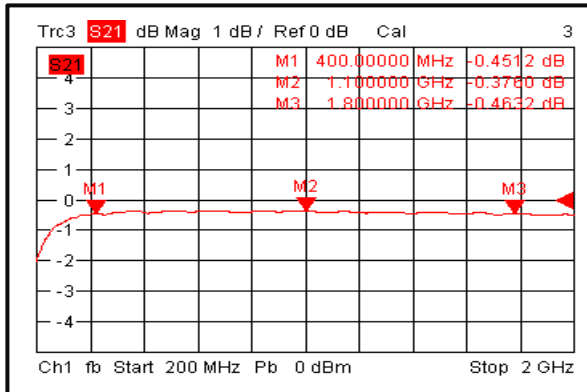


Isolation @-40°C

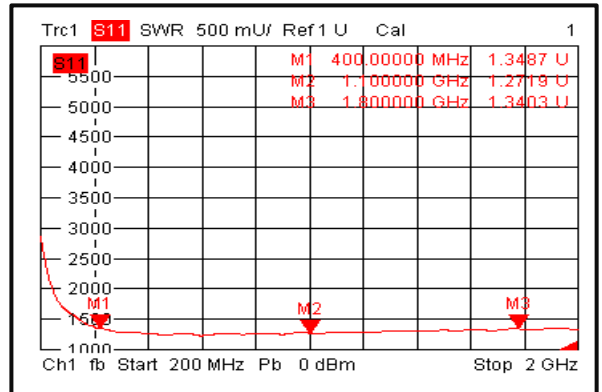




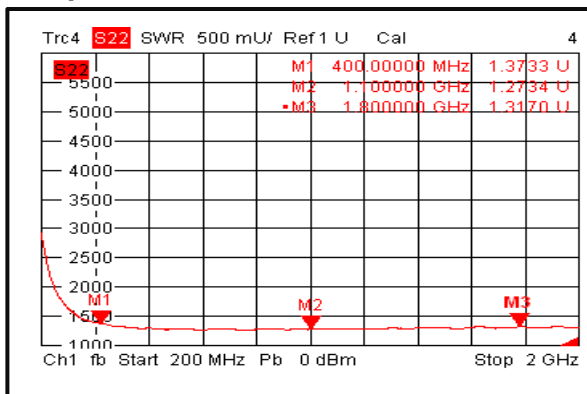
Insertion Loss@+85°C



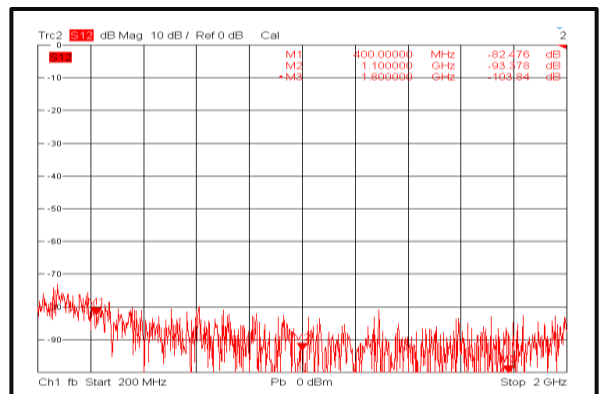
Input VSWR@+85°C



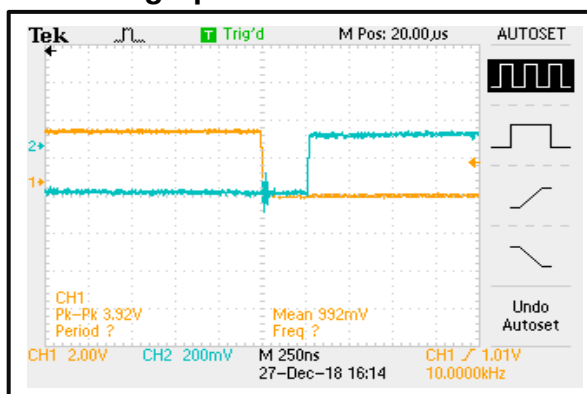
Output VSWR@+85°C



Isolation@+85°C



Switching Speed



Switching Speed

