



Absorptive 2-8GHz Coaxial SP2T Switch



Features

- Wide Band Operation 2-8GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- 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	2		4	4		8	GHz
Insertion Loss		1.0	1.2		1.3	1.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	80	90		80	90		dB
Input VSWR		1.3	1.5		1.3	1.5	: 1
Output VSWR		1.3	1.5		1.3	1.5	: 1
Input Power			30			30	dBm
DC Power Dissipation		0.5			0.5		W
0.1dB Compression Point (P0.1dB)		30			30		dBm
IIP3		55			55		dBm
Switching Speed			100			100	ns
Weight	1.1						Ounces
Impedance	50						Ω
Bias Current (+5V / -5V)	80/50						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

Biasing	+5V ± 10%/-5V ± 10%
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Ordering Information

Part No.	Description
DBSA0202000800A	SP2T 2-8GHz PIN Diode Switch

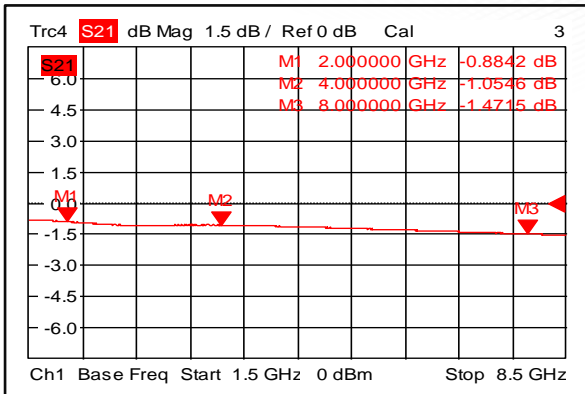
Environmental Specifications

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

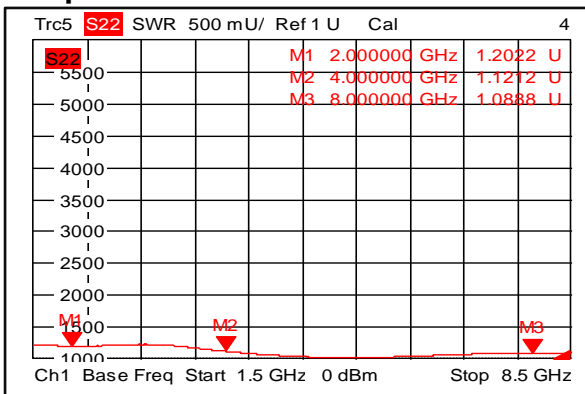
Outline Drawing:

All Dimensions in mm (inches)

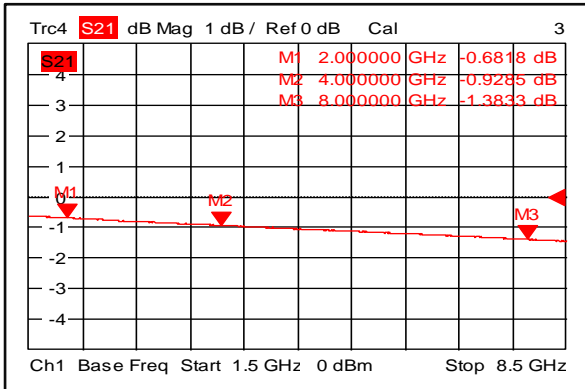
TTL Control Voltage	Low(0)=0~0.8V
THRESHOLD	High(1)=2.8~5V
Control Input TTL	State
1	J0-J1
0	J0-J2
Control Pin Customization available upon request	



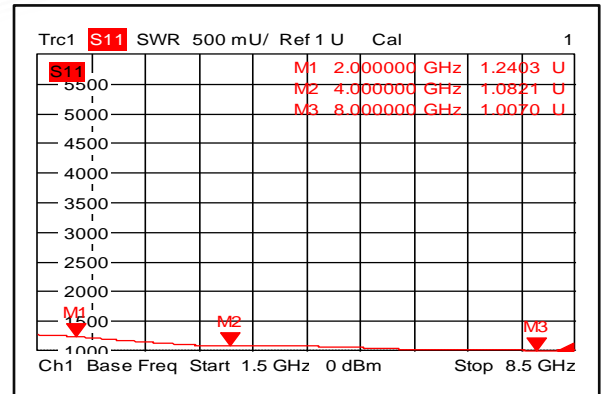
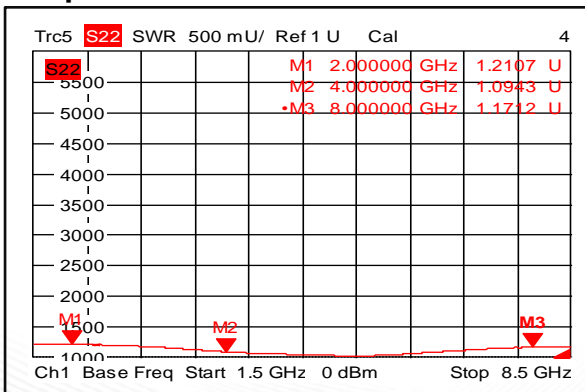
Output VSWR @+25°C



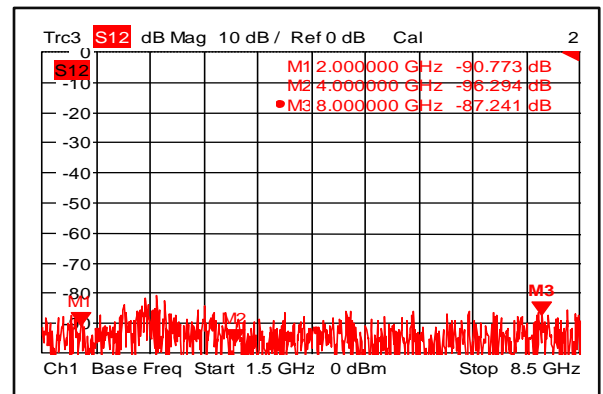
Insertion Loss @-40°C



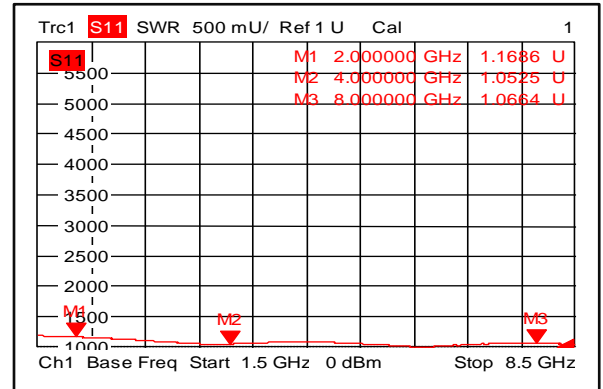
Output VSWR @-40°C



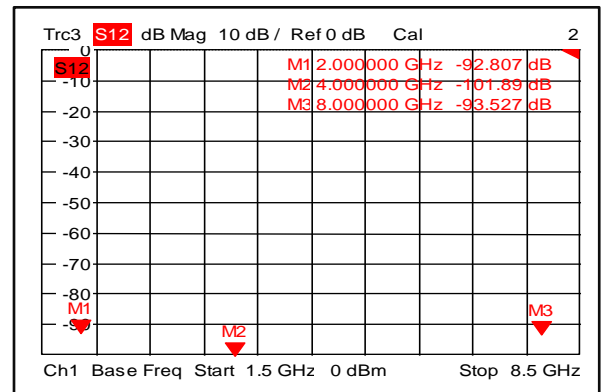
Isolation @+25°C



Input VSWR @-40°C

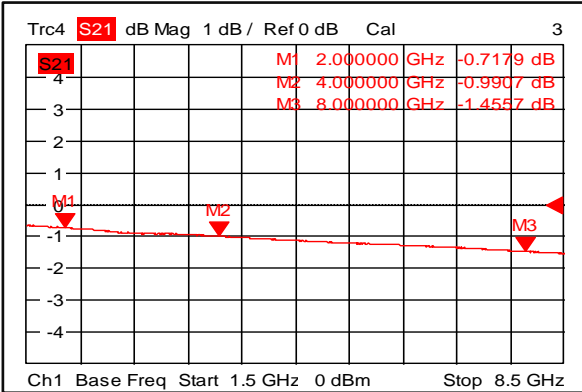


Isolation @-40°C

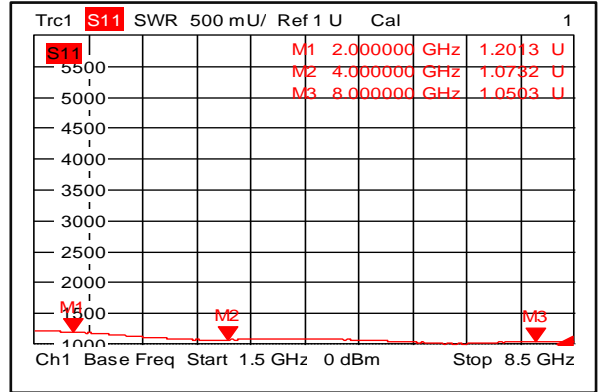




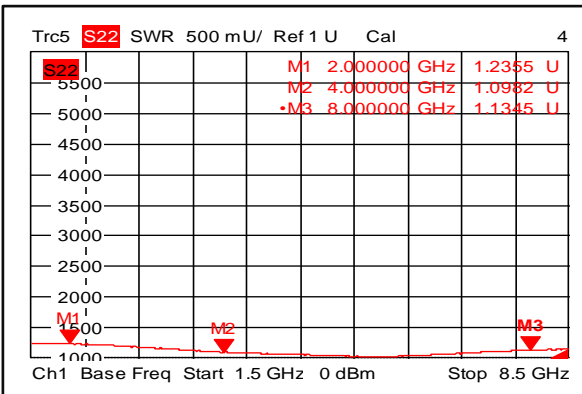
Insertion Loss @+85°C



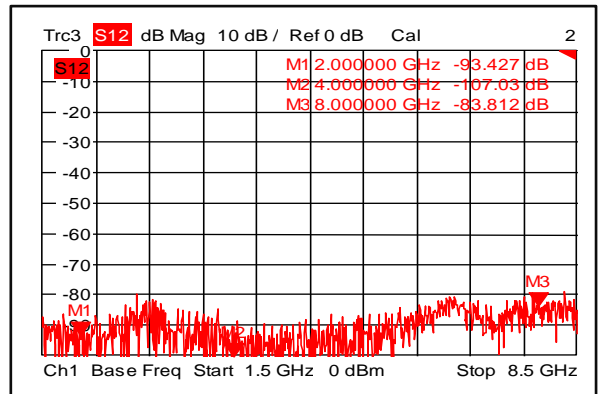
Input VSWR @+85°C



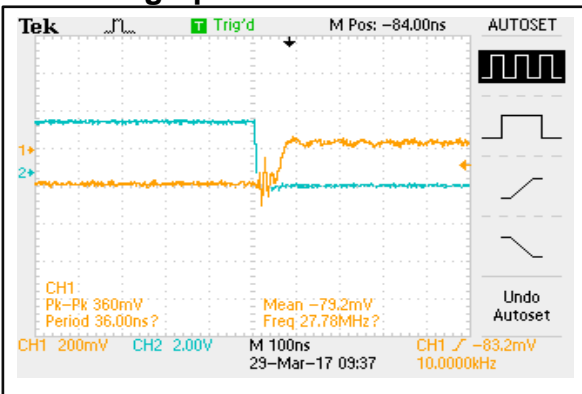
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

