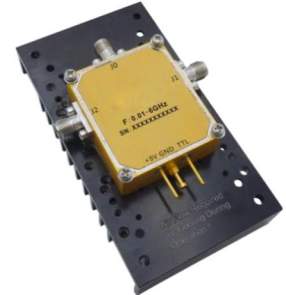




Hermetically Sealed Reflective Coaxial SP2T Switch 0.01 - 6GHz



Features

- Ultra Wide Band Operation 0.01-6GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Typical Applications

- Wireless Infrastructure
- Test and measurement Instrument
- Fiber Optics

RF Microwave & VSAT

5G communication

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.01-3		3-6				GHz
Insertion Loss		0.8	1.0		1.1	1.3	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation (Between any ports)	28	37		20	28		dB
Input VSWR		1.2	1.3		1.3	1.5	: 1
Output VSWR		1.2	1.3		1.3	1.5	: 1
RF Input Power (note 2)			46			46	dBm
DC Power Dissipation		0.7			0.7		W
0.1dB Compression Point (P0.1dB)		46			46		dBm
IIP3 @Two-tone input power = 37 dBm/tone, Δf = 1 MHz		58			58		dBm
Switching Speed	200Max.					ns	
Weight	Net		1.8 Max.			Ounces	
	Including Heat sink		5.0 Max.			Ounces	
Impedance	50					Ω	
Bias Current (+5V)	100 Max.					mA	
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Laser Welded)						



Absolute Maximum Ratings

Biasing	+5.5V
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Ordering Information

Part No.	Description
DBSR0200010600B	SP2T 0.01- 6GHz 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)

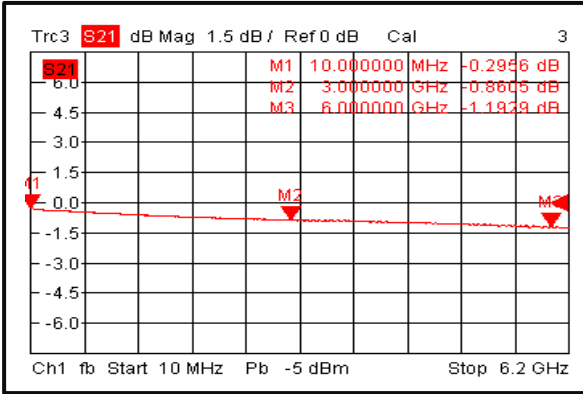
Including Heat sink

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

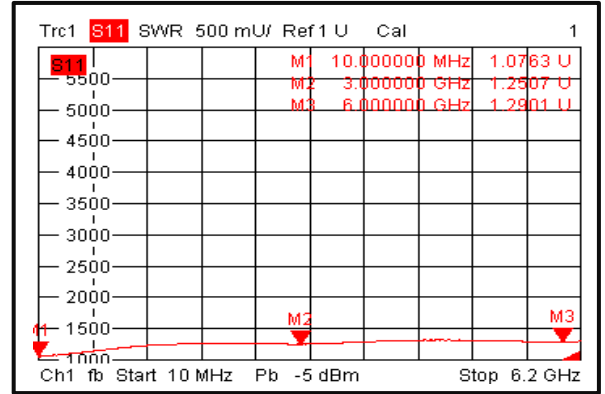
Control Pin Customization available upon request



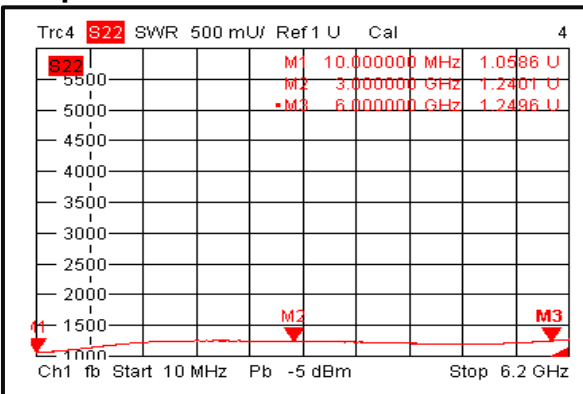
Insertion Loss @+25°C



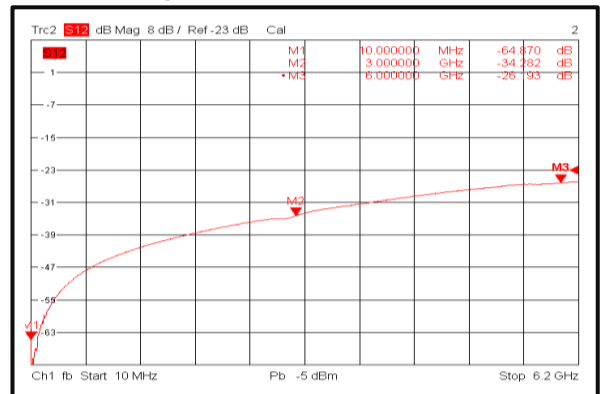
Input VSWR @+25°C



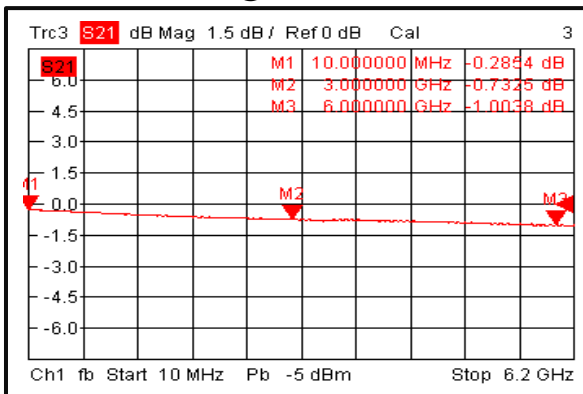
Output VSWR @+25°C



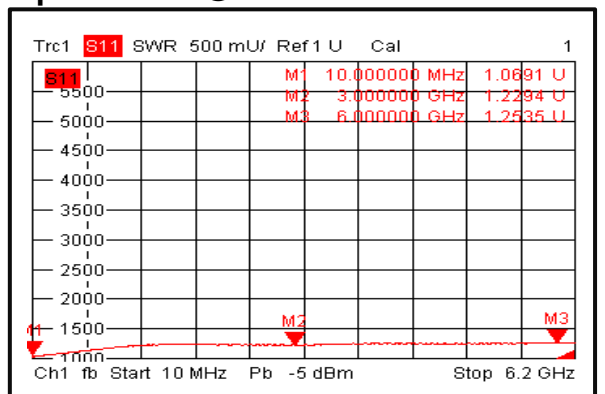
Isolation @+25°C



Insertion Loss @-40°C

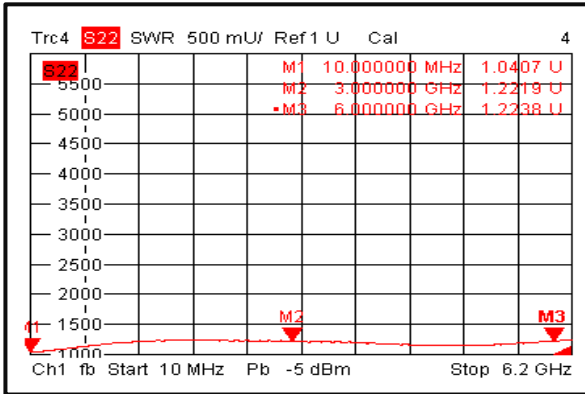


Input VSWR @-40°C

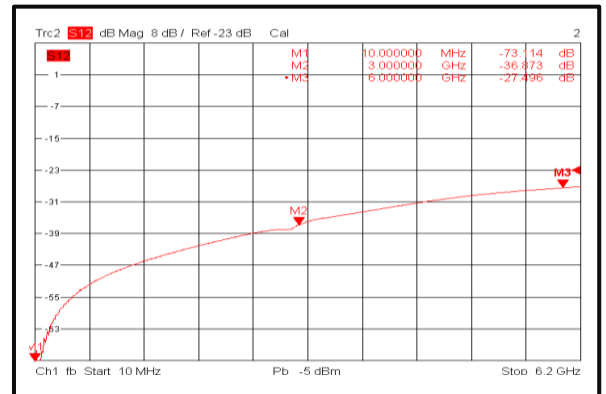




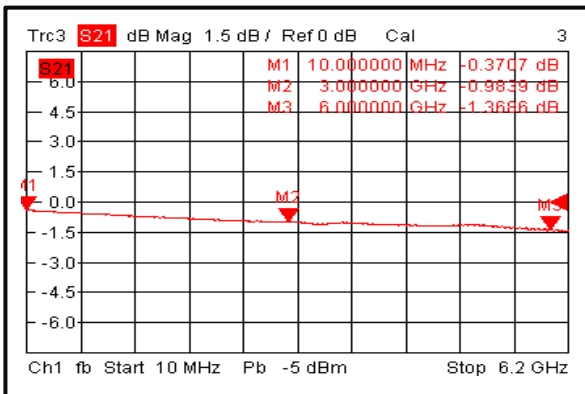
Output VSWR @-40°C



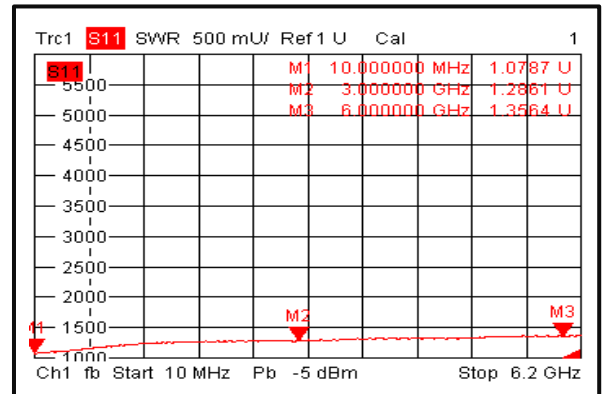
Isolation @-40°C



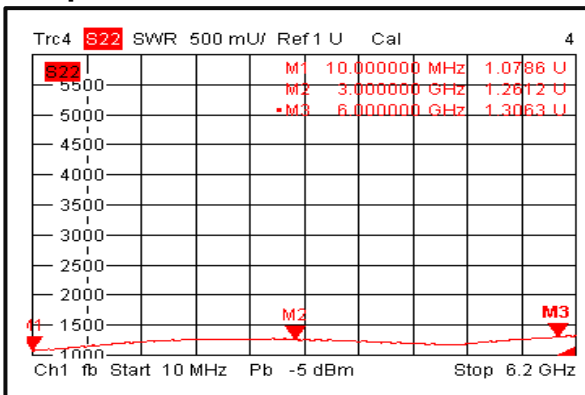
Insertion Loss @+85°C



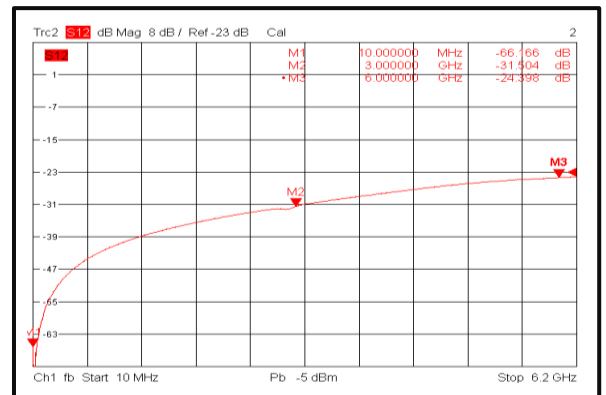
Input VSWR @+85°C



Output VSWR @+85°C

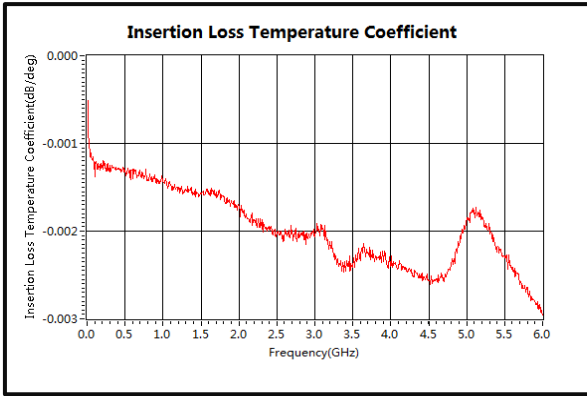


Isolation @+85°C

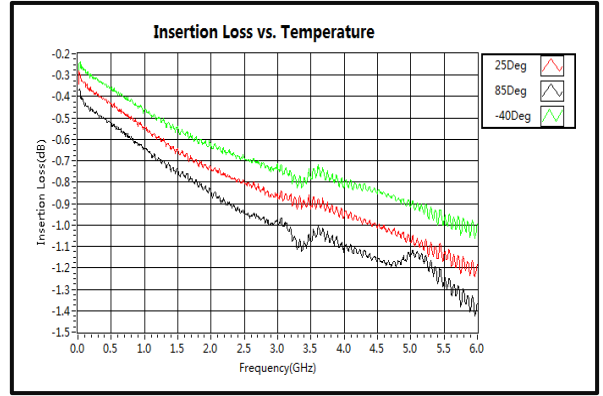




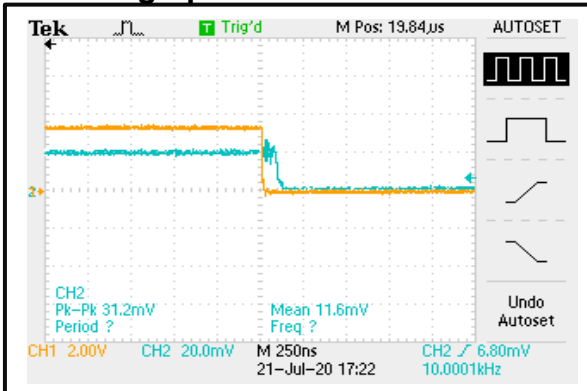
Insertion Loss Temperature Coefficient



Insertion Loss vs. Temperature



Switching Speed



Switching Speed

