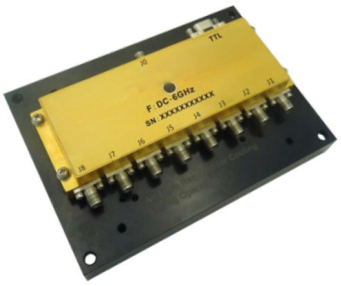
Reflective Coaxial SP8T Switch DC- 6GHz



Features

- Ultra Wide Band Operation DC-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		DC-3			3-6		GHz
Insertion Loss		2.8	3.8		3.8	4.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	40	45		35	40		dB
Input VSWR		1.5	2.0		1.5	1.8	: 1
Output VSWR		1.5	2.0		1.5	1.8	: 1
RF Input Power (pulsed, 10% Duty Cycle, 20us pulse width)			100			100	W
DC Power Dissipation		8.5			8.5		W
0.1dB Compression Point (P0.1dB)		50			50		dBm
IIP3		55			55		dBm
Switching Speed	250 Typ.						ns
Weight	24 Max. (Including Heat sink)						Ounces
Impedance	50						Ω
Bias Current (+12V)	130 Typ. 200 Max.						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						

Absolute Maximum Ratings

Biasing	+12V±10%

Environmental Specifications

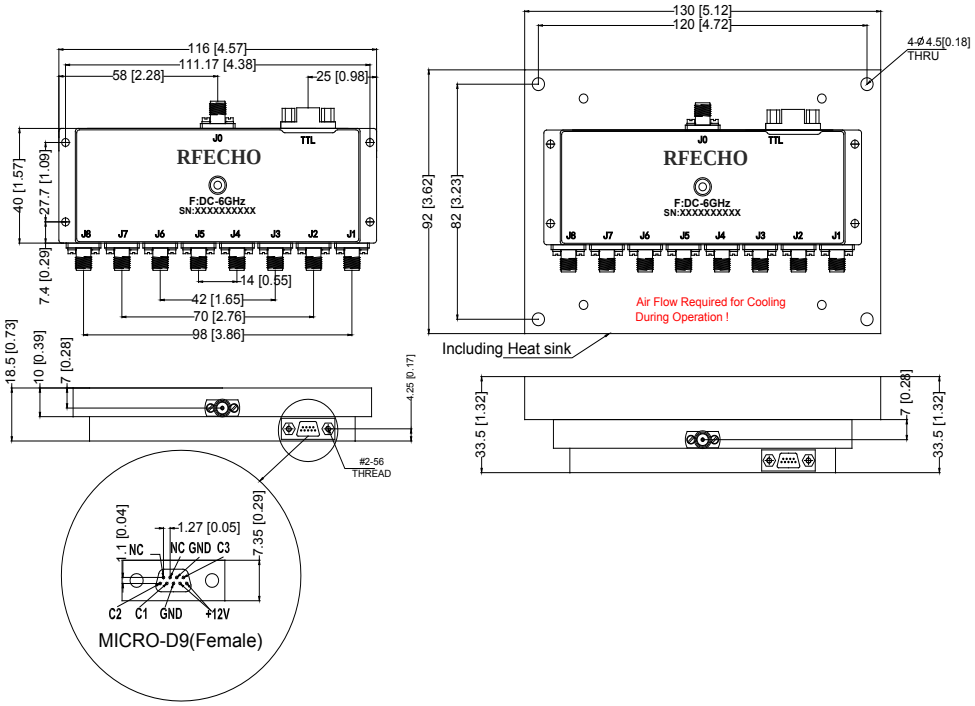
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH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

Ordering Information

Part No.	Description
DBSR0800000600B	SP8T DC-6GHz GaN Diode Switch

Outline Drawing:

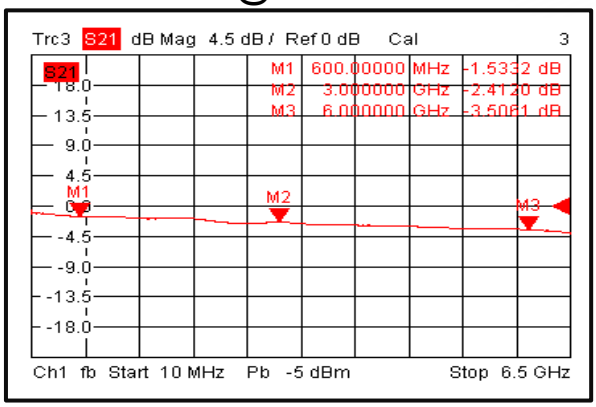
All Dimensions in mm (inches) Housing Tolerances ±0.2 (0.008)



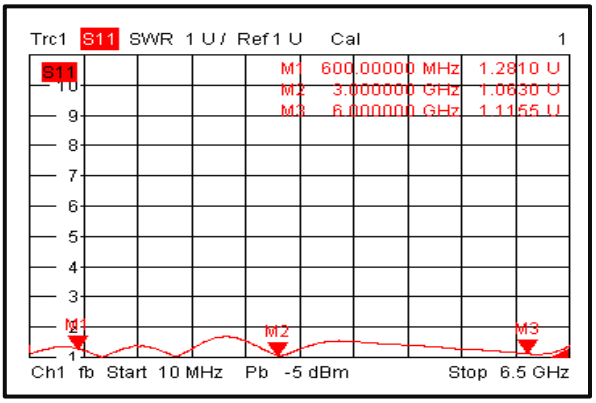
Truth Table

TTL Control Voltage THRESHOLD			Low(0)=0~0.8V
			High(1)=2.8~5V
Control Input TTL			Signal Path State
C3	C2	C1	
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6
1	1	0	J0-J7
1	1	1	J0-J8
Control Pin Customization available upon request			

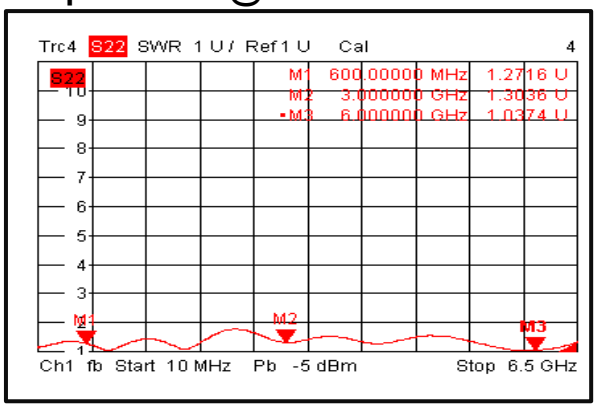
Insertion Loss @+25℃



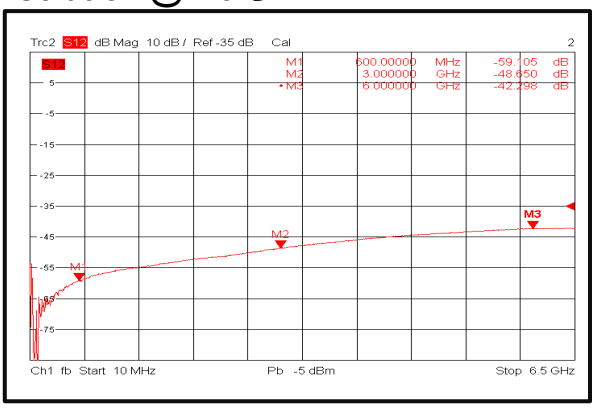
Input VSWR @+25℃



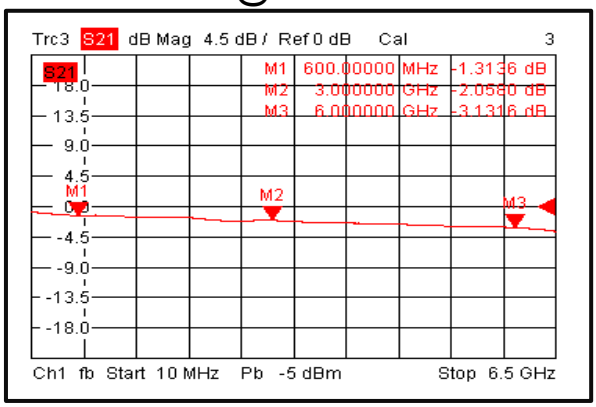
Output VSWR @+25℃



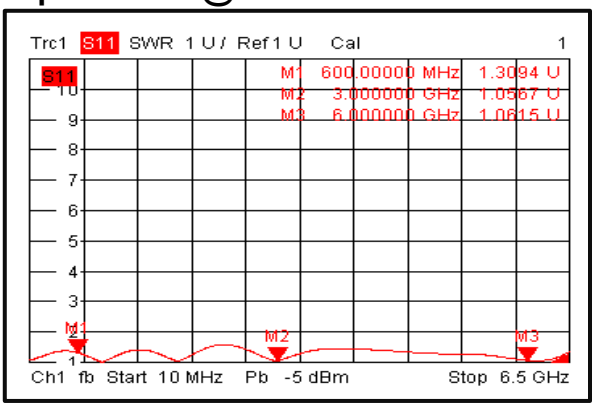
Isolation @+25℃



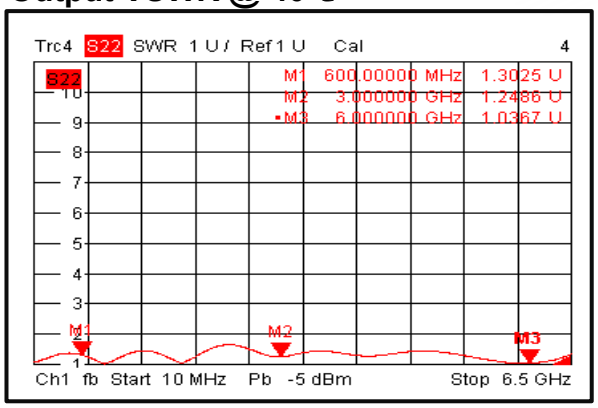
Insertion Loss @-40℃



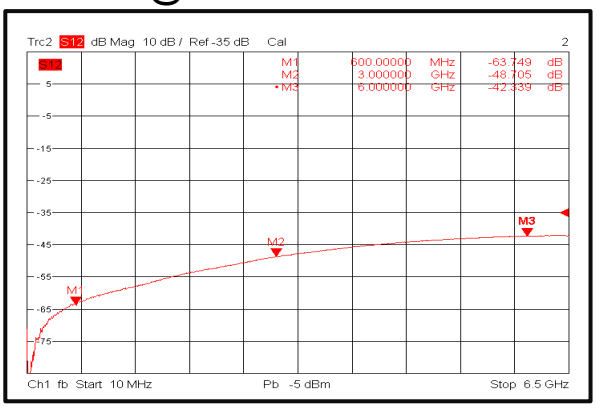
Input VSWR @-40℃



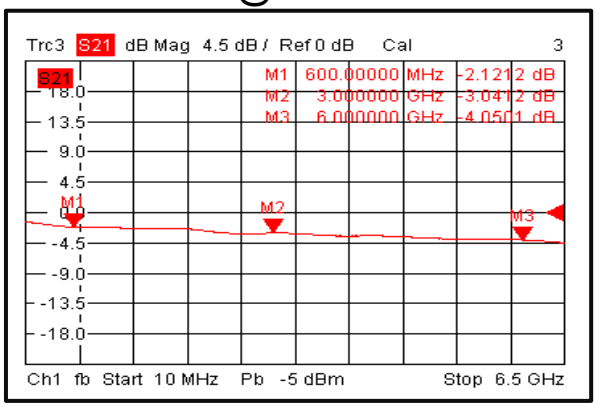
Output VSWR @-40℃



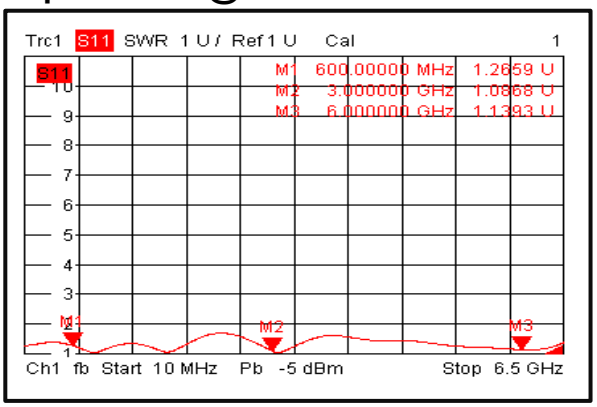
Isolation @-40℃



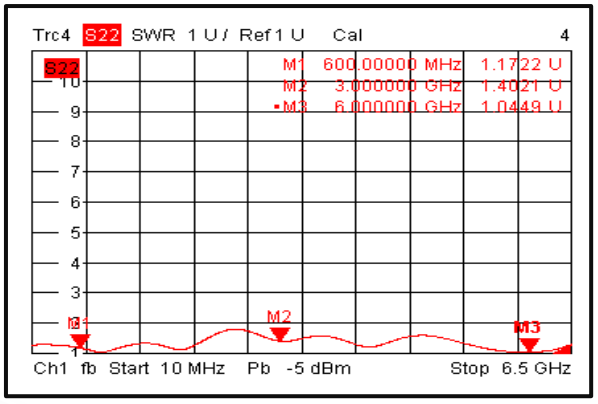
Insertion Loss @+85℃



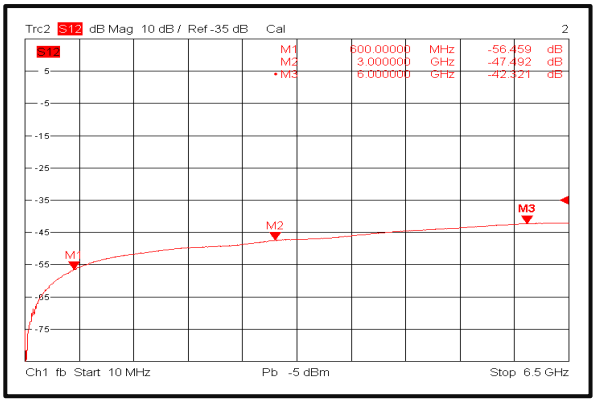
Input VSWR @+85℃



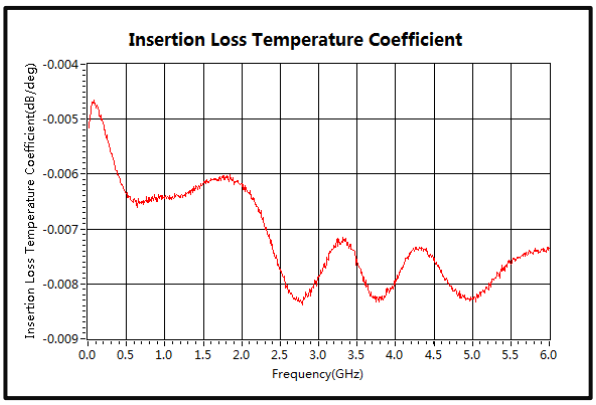
Output VSWR @+85℃



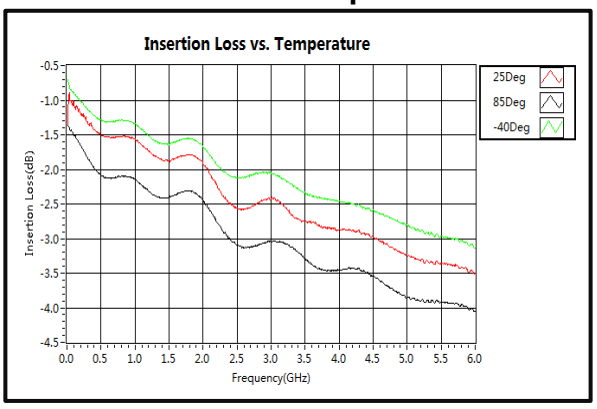
Isolation @+85℃



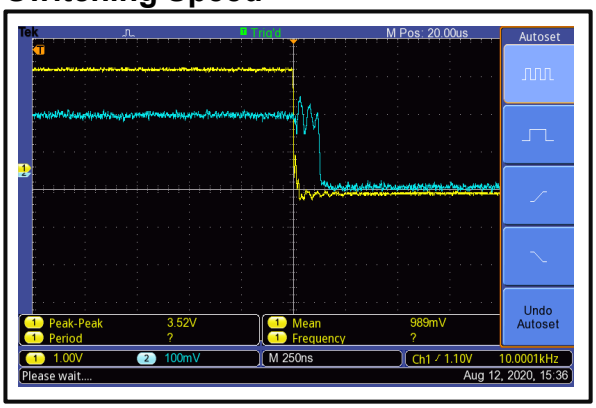
Insertion Loss Temperature Coefficient



Insertion Loss vs. Temperature



Switching Speed



Switching Speed