

Reflective 0.5-6GHz Coaxial SP2T Switch

Features

- Ultra Wide Band Operation 0.5-6GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request
- High Power Cold Switching



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	0.5-3			3-6			GHz
Insertion Loss		1.1	1.3		1.3	1.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	40	48		35	38		dB
Input VSWR		1.4	1.6		1.4	1.6	: 1
Output VSWR		1.4	1.6		1.4	1.6	: 1
RF Input Power			50			50	dBm
DC Power Dissipation		0.5			0.5		W
0.1dB Compression Point (P0.1dB) (Pulsed)			50			50	dBm
IIP3		55			55		dBm
Switching Speed	400 Max.						ns
Weight	8.0 Max.						Ounces
Impedance	50						Ω
Bias Current (+5V)	100 Max.						mA
Input / Output Connectors	N - Female						
Finish	Gold Plated						
Material	copper						
Sealing	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

Biasing	+5.5V
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Ordering Information

Part No.	Description
DBSR0200500600A	SP2T 0.5-6GHz GaN Switch

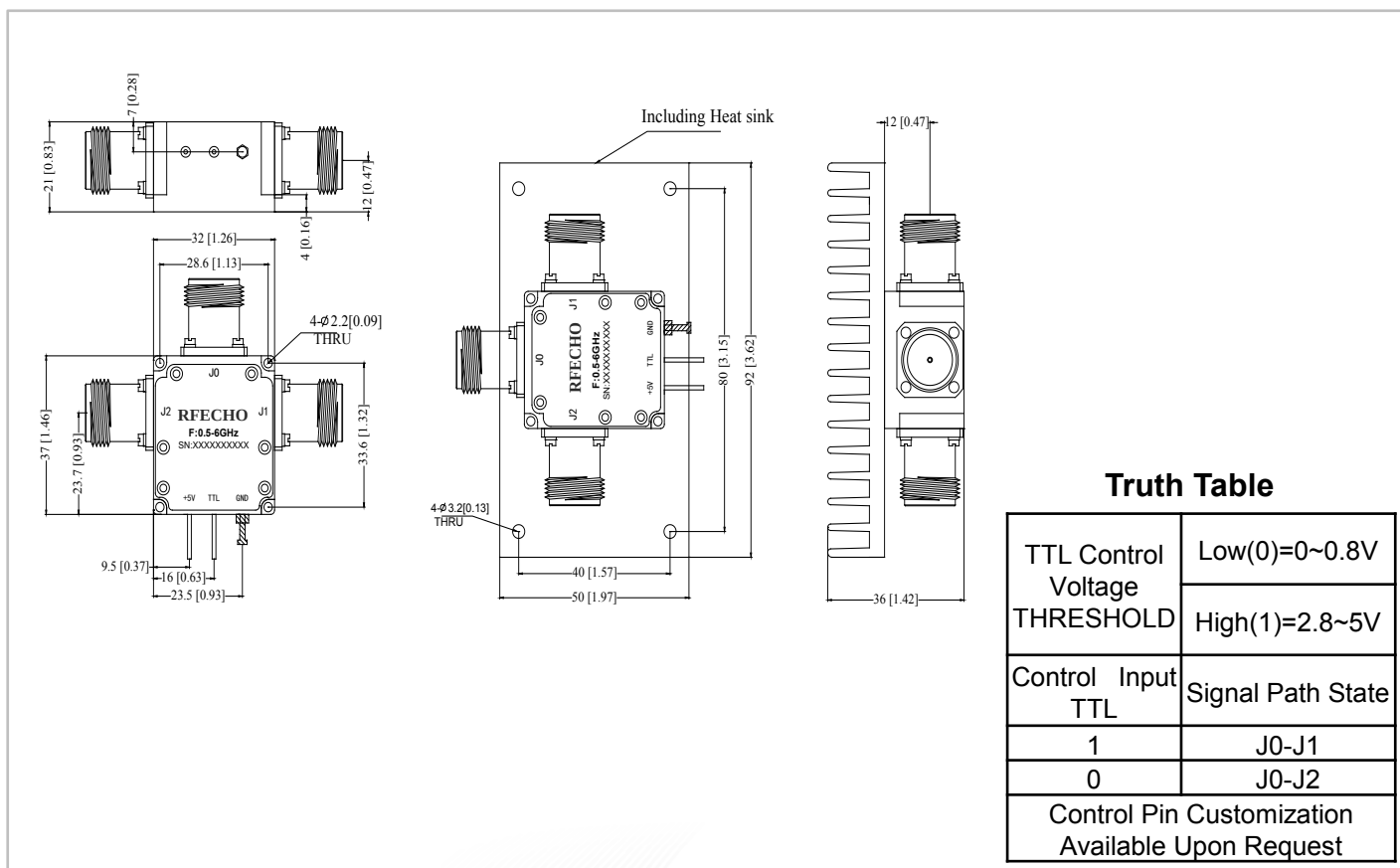
Environmental Specifications

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:

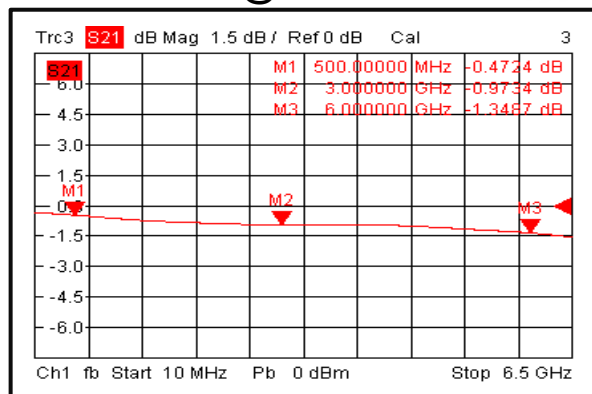
All Dimensions in mm (inches)

Housing Tolerances ± 0.2 (0.008)

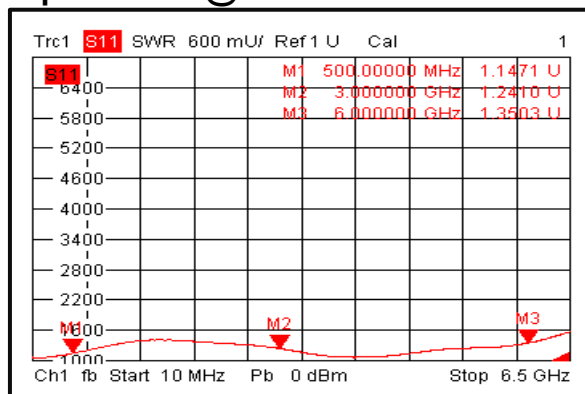




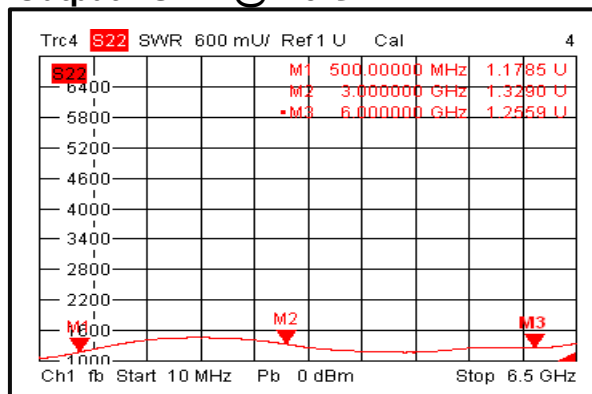
Insertion Loss @+25°C



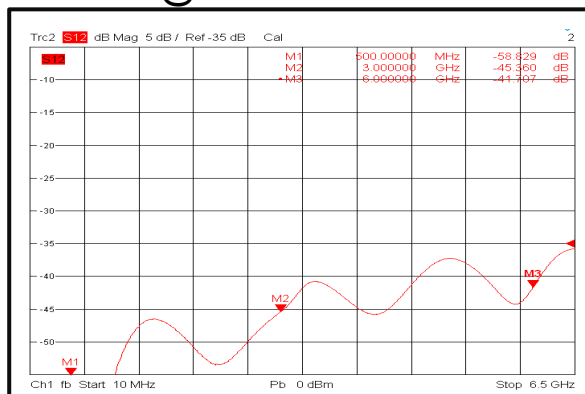
Input VSWR @+25°C



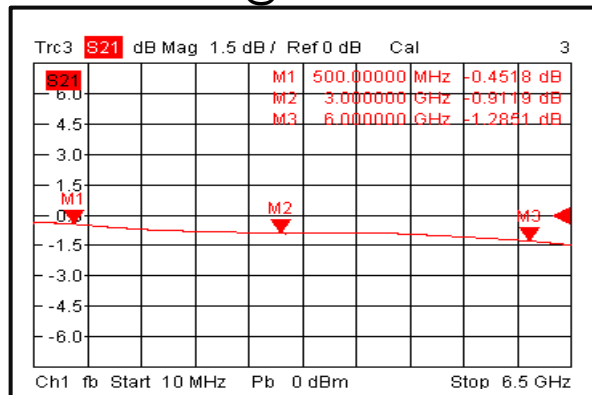
Output VSWR @+25°C



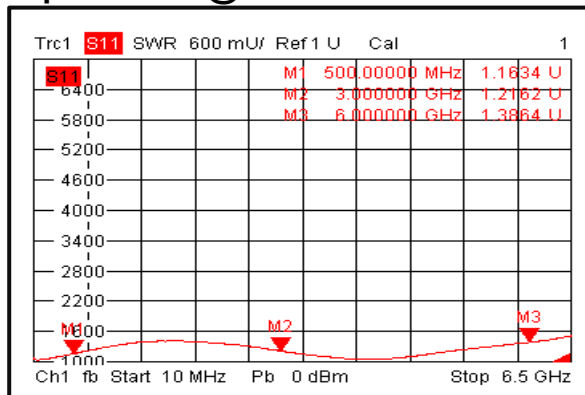
Isolation @+25°C



Insertion Loss @-40°C

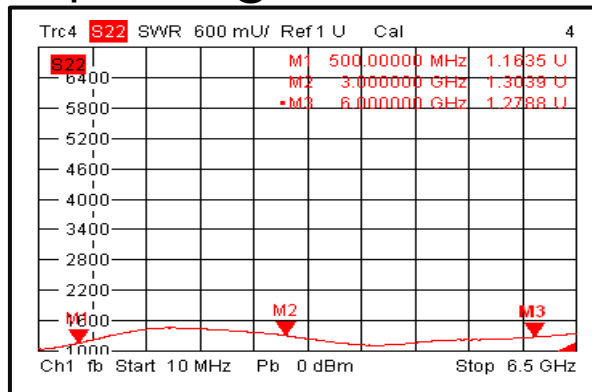


Input VSWR @-40°C

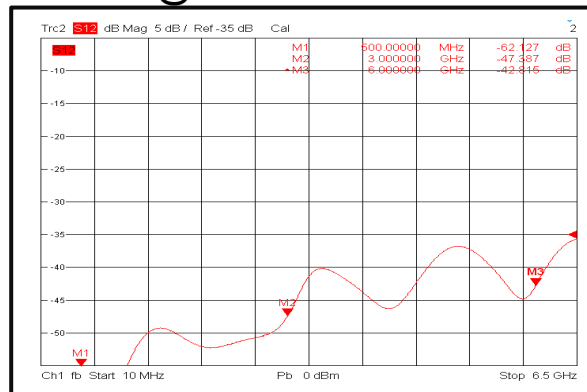




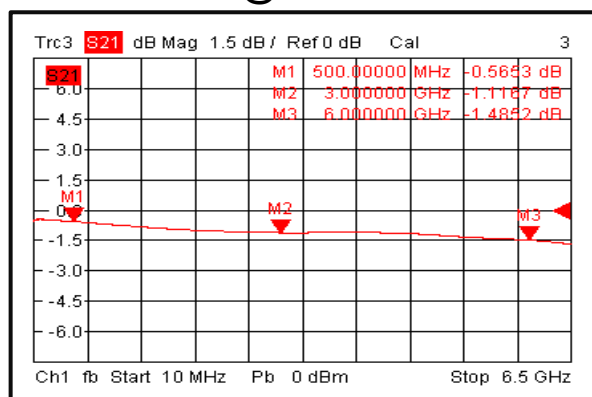
Output VSWR @-40°C



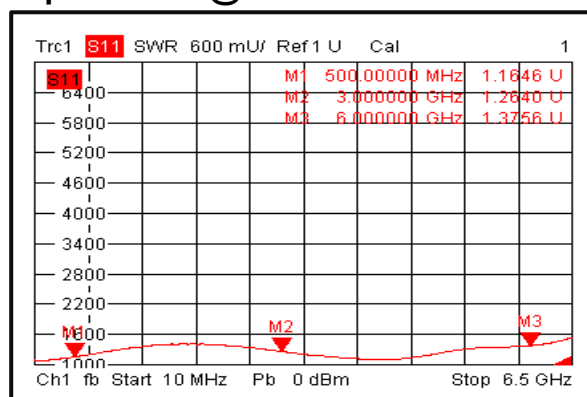
Isolation @-40°C



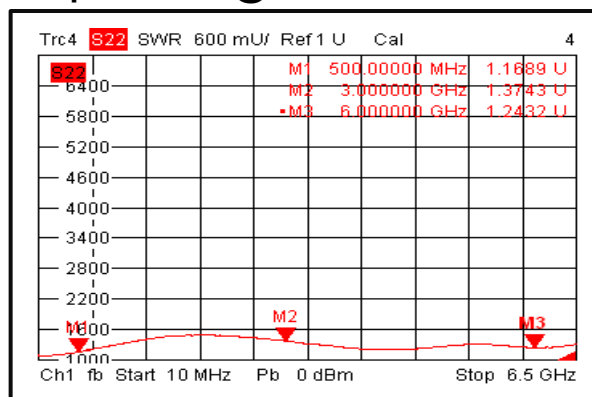
Insertion Loss @+85°C



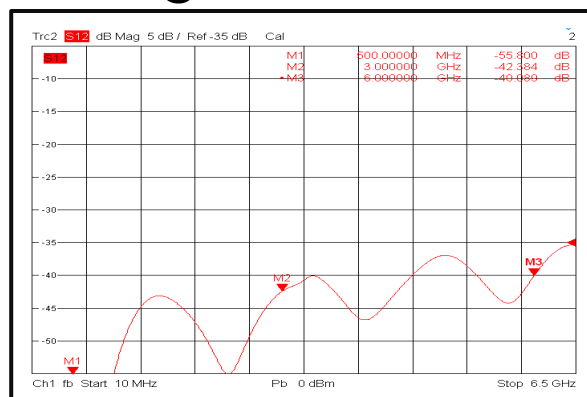
Input VSWR @+85°C



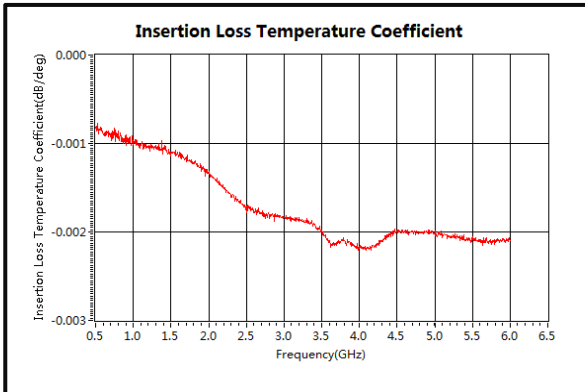
Output VSWR @+85°C



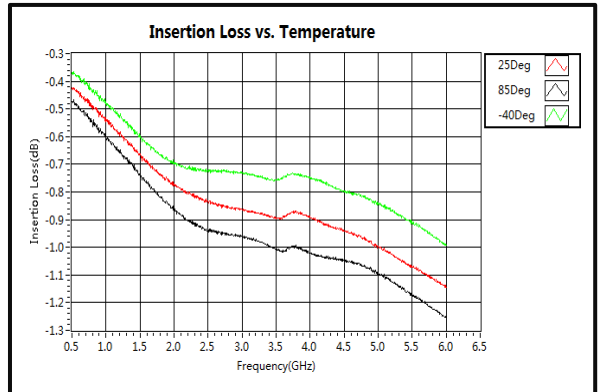
Isolation @+85°C



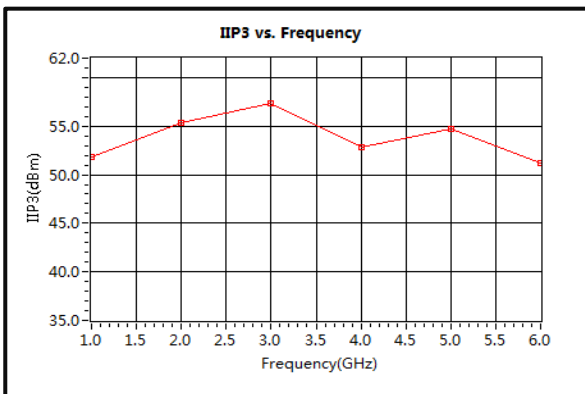
Insertion Loss Temperature Coefficient



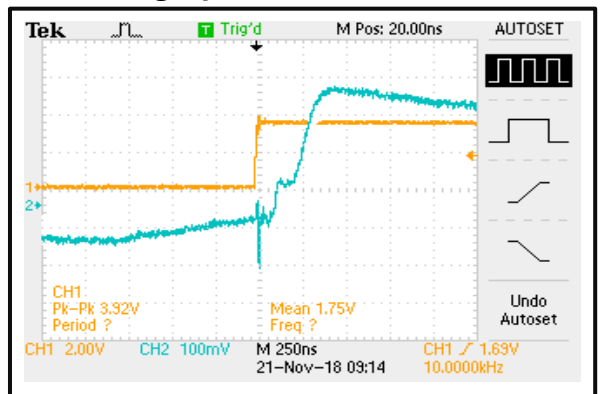
Insertion Loss vs. Temperature



IIP3



Switching Speed



Switching Speed

