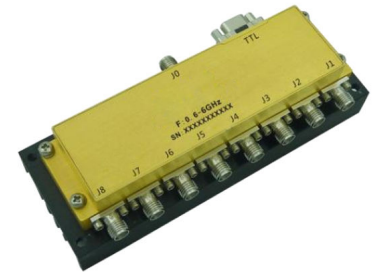




# 100W Reflective Coaxial SP8T Switch 0.6 - 6GHz

## Features

- Ultra Wide Band Operation 0.6-6GHz
- TTL compatible driver included
- 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.	Min.	Typ.	Max.	Units
Frequency Range		0.6-3			3-6			GHz
Insertion Loss			1.0	1.5		1.8	2.5	dB
Insertion Loss Temperature Coefficient			0.003			0.003		dB/ ° C
Isolation		55	65		50	55		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 (note 2)	Type A – Heatsink			20			20	W
	Type B – Air Cooling			100			100	W
DC Power Dissipation			2.5			2.5		W
0.1dB Compression Point (P0.1dB)			50			50		dBm
IIP3			55			58		dBm
Switching Speed		0.25 Typ. 1.0 Max.						us
Weight	Type A – Heatsink	11.0 Max.						ounces
	Type B – Air Cooling	/						
Impedance		50						Ω
Bias Current (+5V / -28V)		280/180 Max.						mA
Input / Output Connectors		SMA-Female						
Finish		Gold Plated						
Material		Aluminum						
Sealing		Hermetically Sealed (Optional)						



### Absolute Maximum Ratings

Biasing	+5V ± 10%/-28V ± 10%
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### Environmental Specifications

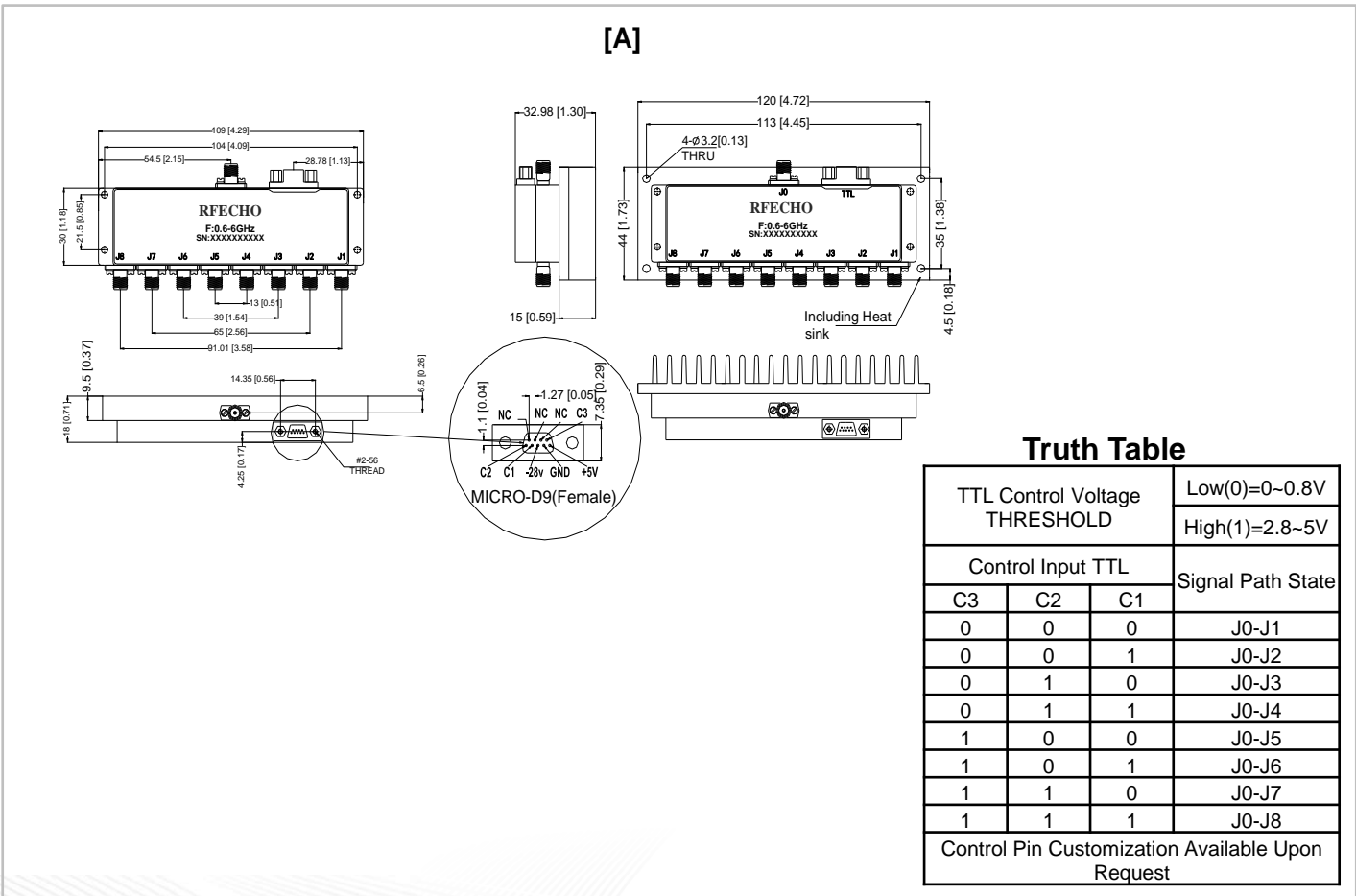
Operational Temperature	-40°C~+85°C(Case Temperature)
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100%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

### Ordering Information

Part No.	Description
DBSR0800500600A	SP8T 0.6-6GHz PIN Diode Switch

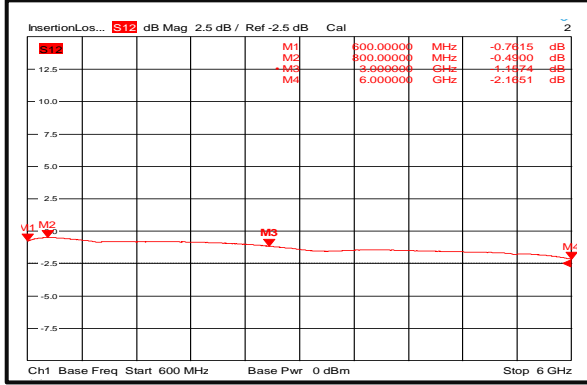
### Type A - Heatsink Option Outline Drawing:

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

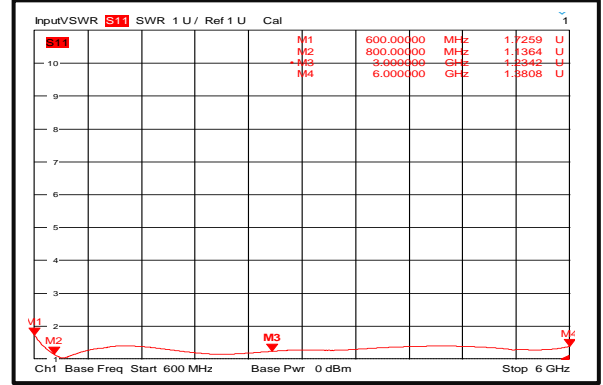




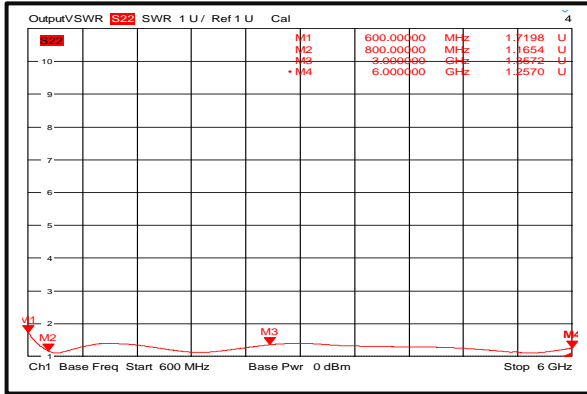
### Insertion Loss @+25°C



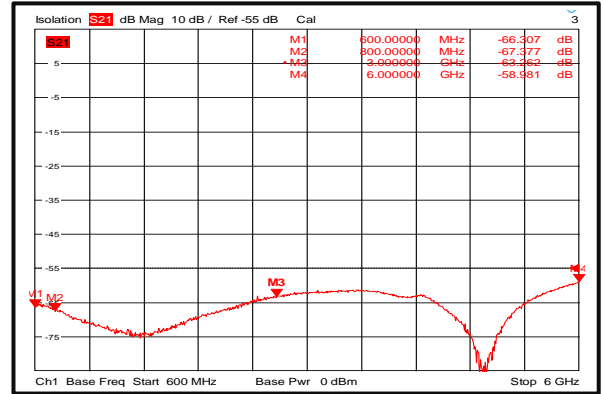
### Input VSWR @+25°C



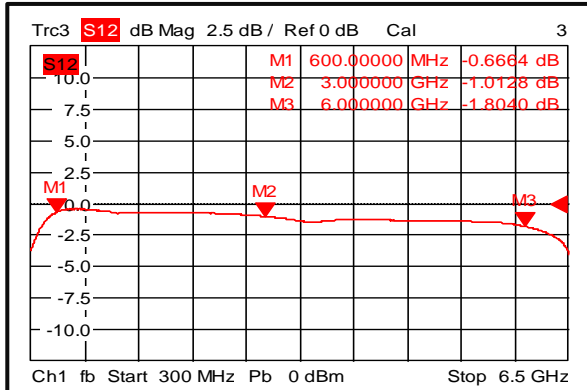
### Output VSWR @+25°C



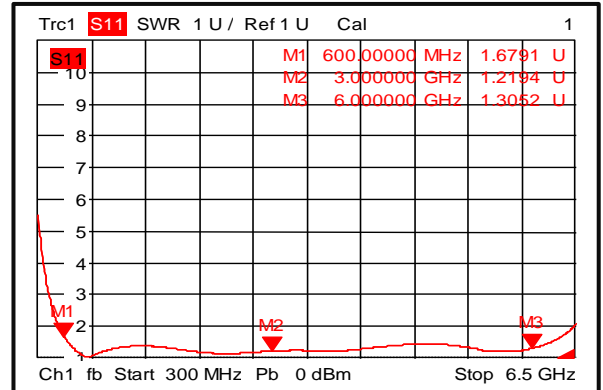
### Isolation @+25°C



### Insertion Loss @-40°C

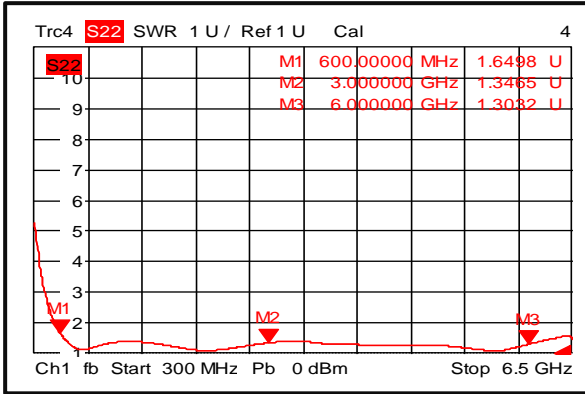


### Input VSWR @-40°C

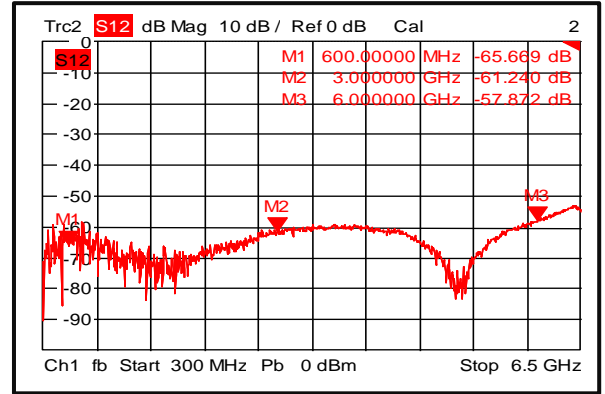




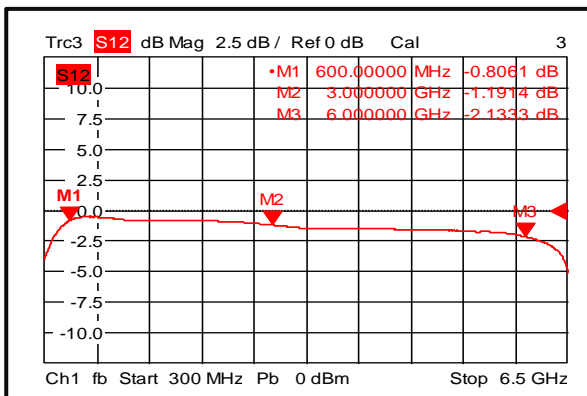
### Output VSWR @-40°C



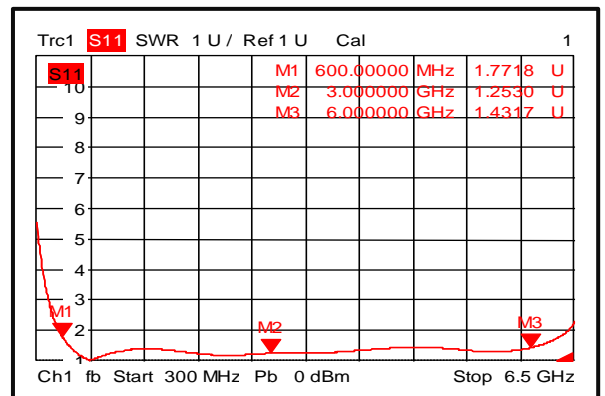
### Isolation @-40°C



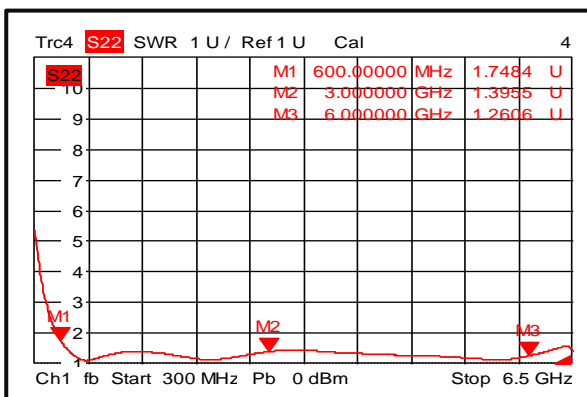
### Insertion Loss @+85°C



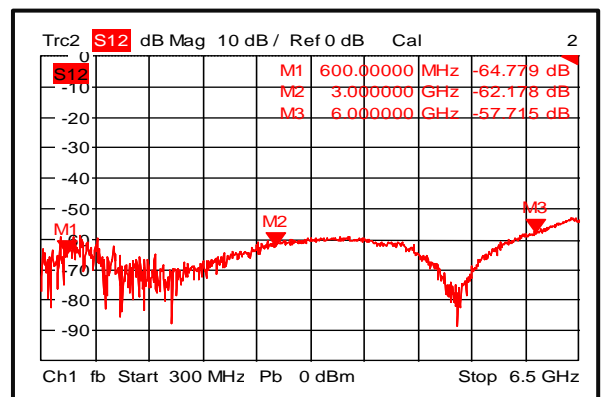
### Input VSWR @+85°C



### Output VSWR @+85°C

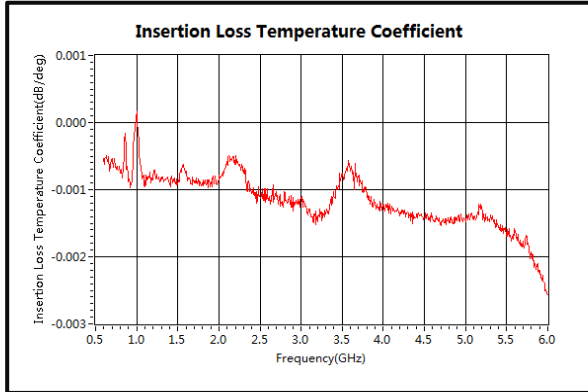


### Isolation @+85°C

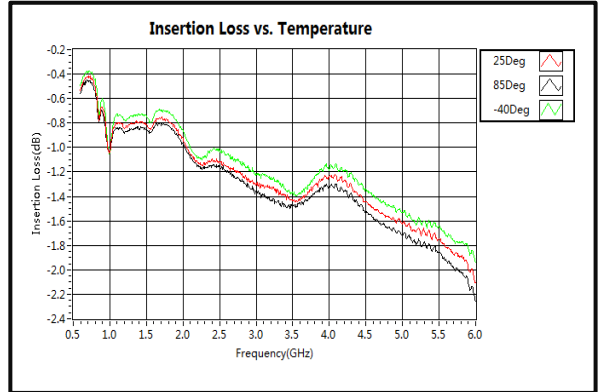




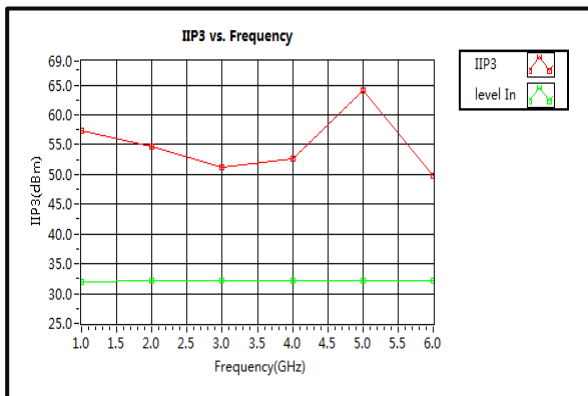
### Insertion Loss Temperature Coefficient



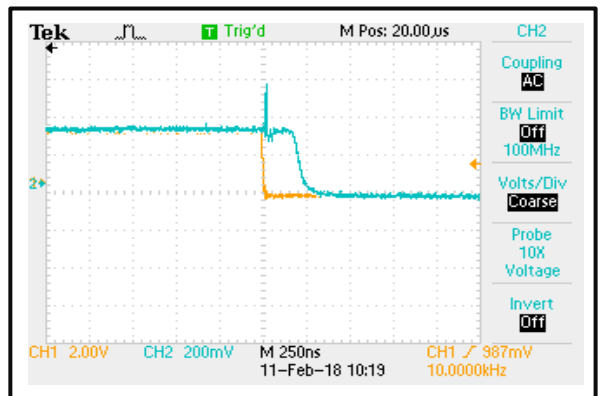
### Insertion Loss vs. Temperature



### IIP3



### Switching Speed



### Switching Speed

