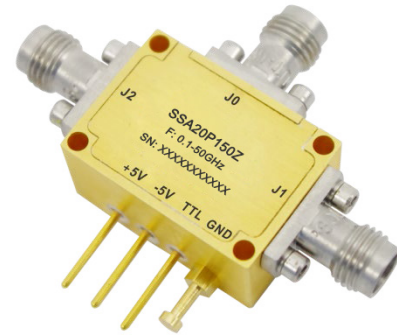


**Absorptive 0.1-50GHz Coaxial SP2T Switch**
**Features**

- Ultra Wide Band Operation 0.1-50GHz
- 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.	Min.	Typ.	Max.	Units
Frequency Range	0.1-18			18-43.5			43.5-50			GHz
Insertion Loss		3.3	4		4.5	5		6.2	7.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	50	65		40	50		50	55		dB
Input VSWR		1.8	2.5		2.5	3		2	2.5	: 1
Output VSWR		1.8	2.5		2.5	3		2	2.5	: 1
RF Input Power			23			23			23	dBm
DC Power Dissipation		0.8			0.8			0.8		W
0.1dB Compression Point ( P0.1dB )		23			23			23		dBm
IIP3		45			45			45		dBm
Switching Speed	50Typ 100Max.									ns
Weight	0.8 Max.									Ounces
Impedance	50									Ω
Bias Current ( +5V / -5V )	100/50 Max.									mA
Input / Output Connectors	2.4mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									

**Absorptive 0.1-50GHz Coaxial SP2T Switch**

**Absolute Maximum Ratings**

Biasing	+5V ± 10%/-5V ± 10%
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Note: TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.

**Ordering Information**

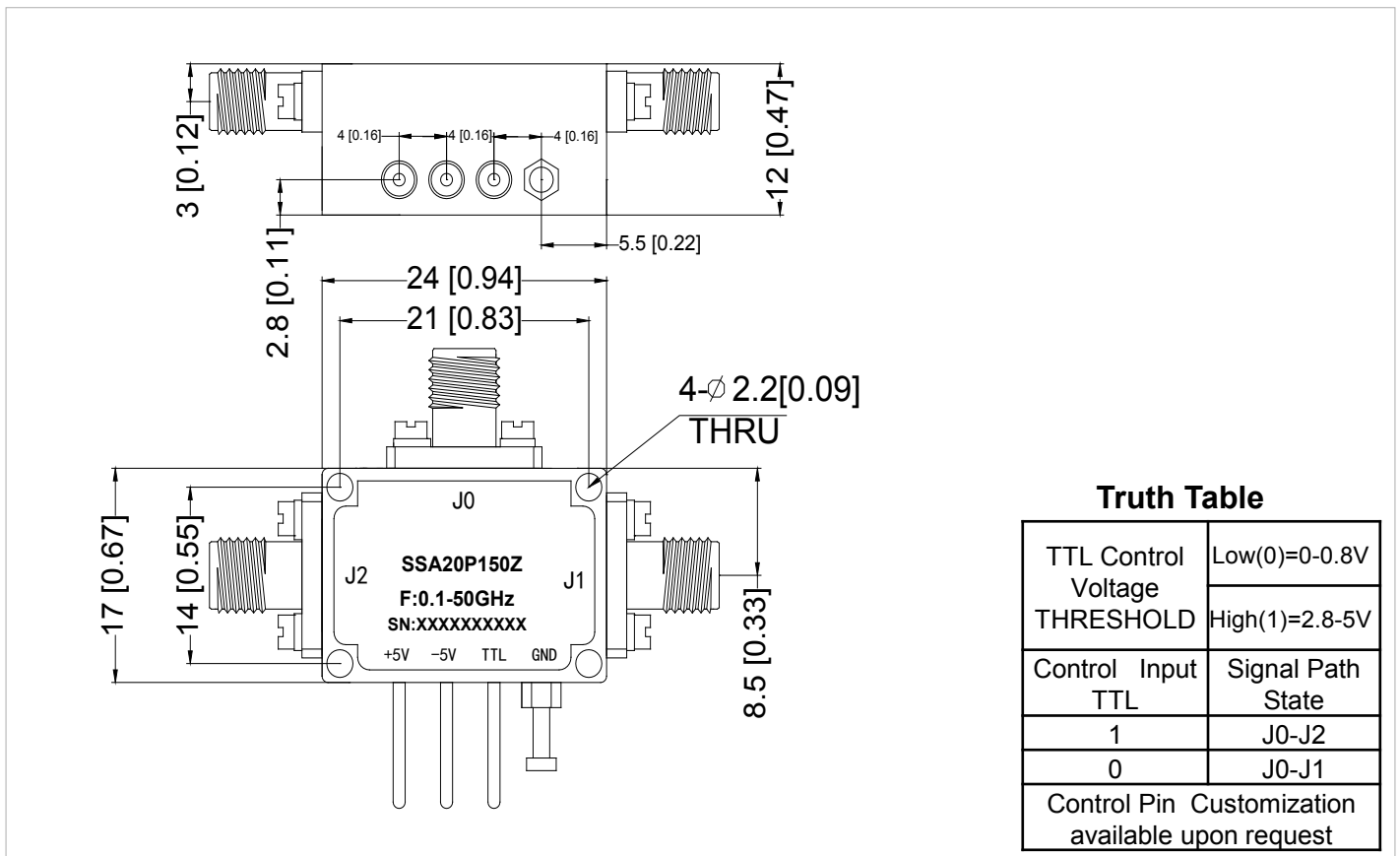
Part No.	Description
SSA20P150Z	SP2T 0.1-50GHz PIN Diode Switch

**Environmental Specifications**

Operational Temperature	-40°C to +85°C
Storage Temperature	-50°C to +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

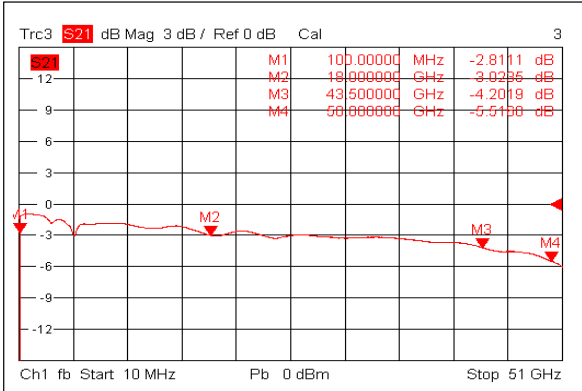
**Outline Drawing:**

All Dimensions in mm (inches)

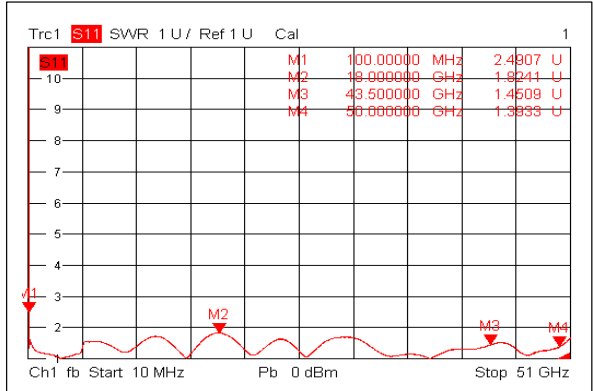


Absorptive 0.1-50GHz Coaxial SP2T Switch

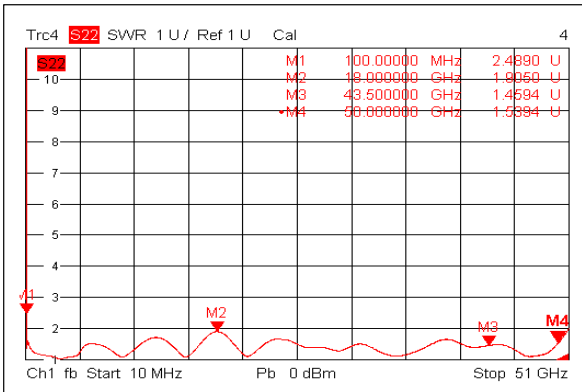
Insertion Loss @+25°C



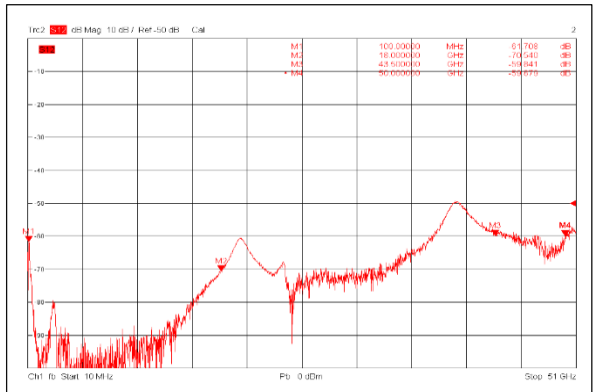
Input VSWR @+25°C



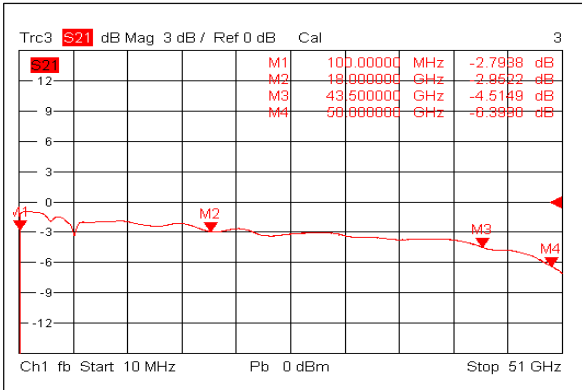
Output VSWR @+25°C



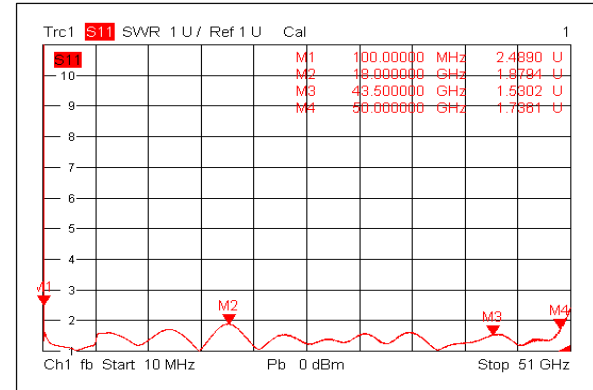
Isolation @+25°C



Insertion Loss @-40°C

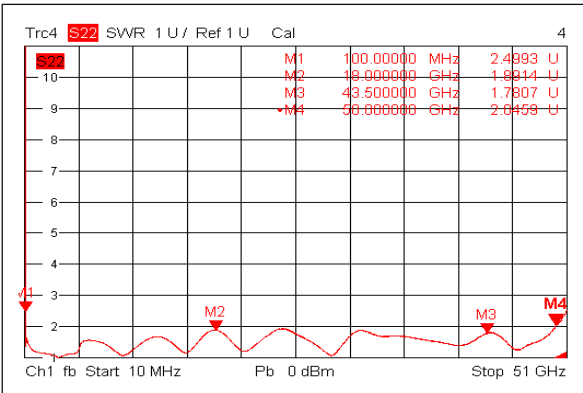


Input VSWR @-40°C

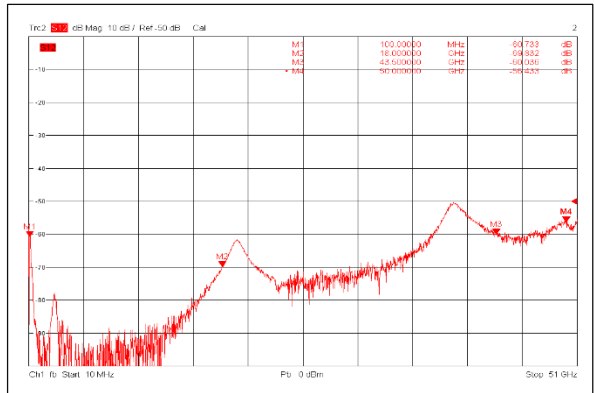


Absorptive 0.1-50GHz Coaxial SP2T Switch

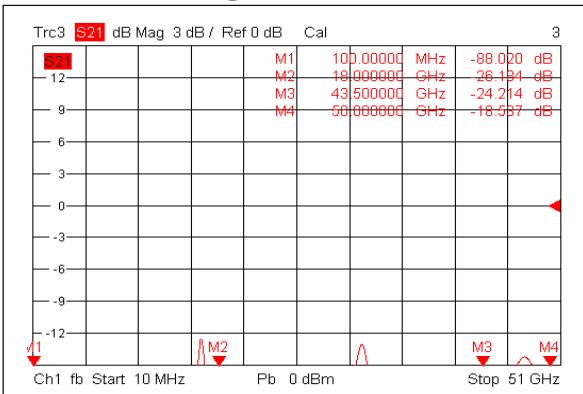
Output VSWR @-40°C



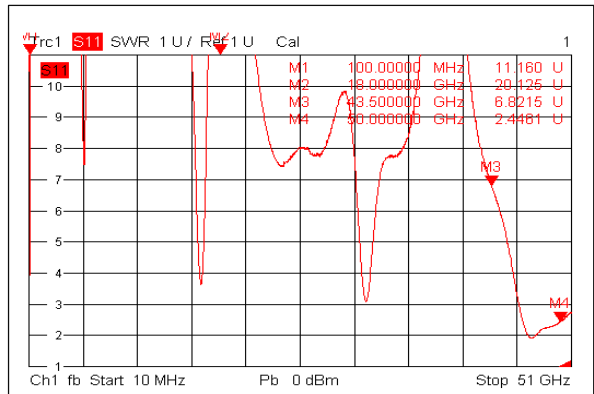
Isolation @-40°C



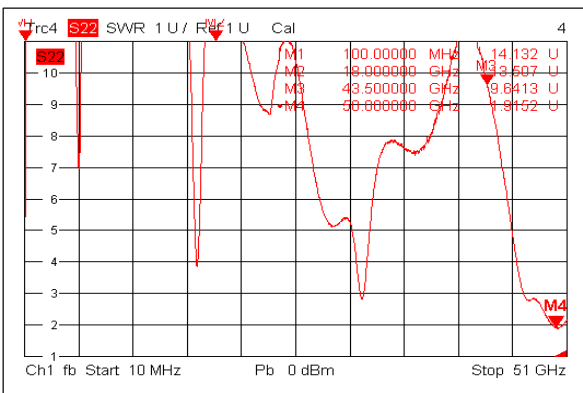
Insertion Loss @+85°C



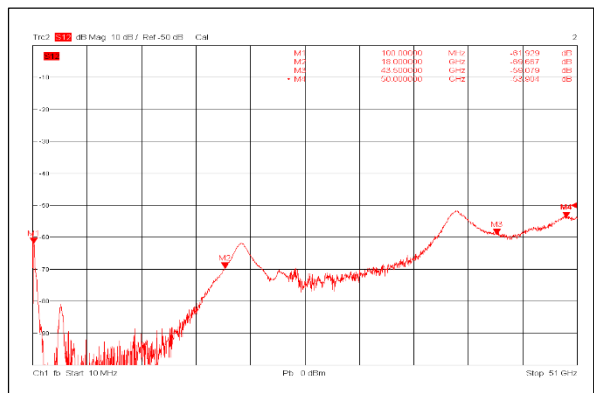
Input VSWR @+85°C



Output VSWR @+85°C

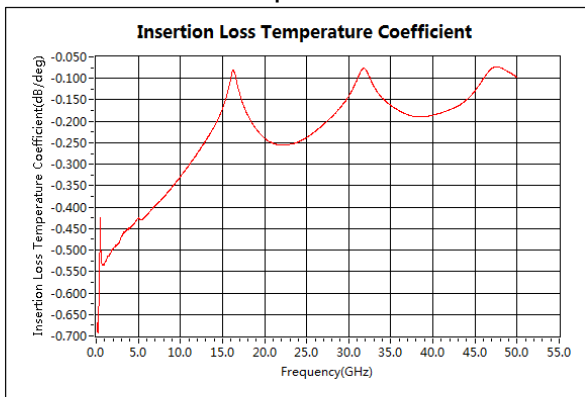


Isolation @+85°C

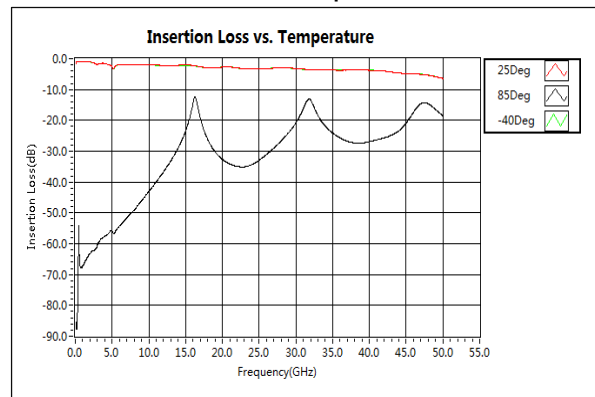


Absorptive 0.1-50GHz Coaxial SP2T Switch

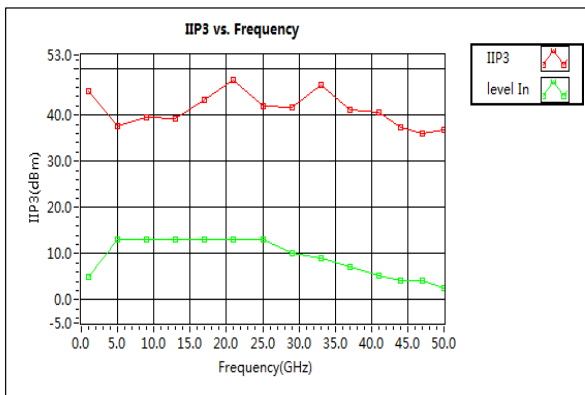
Insertion Loss Temperature Coefficient



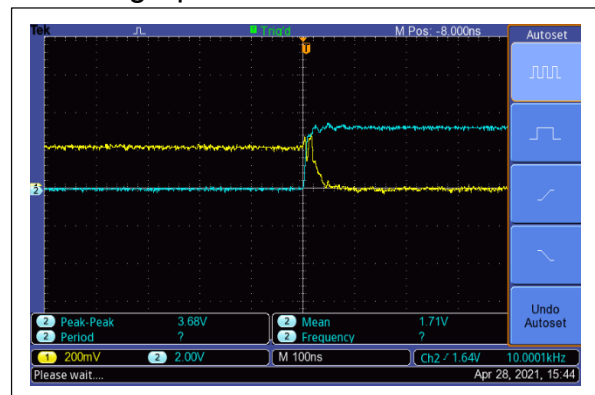
Insertion Loss vs. Temperature



IIP3



Switching Speed



Switching Speed

