

## S13-16A5811

S2D Microwave, Inc. offers broad band, high performance RF Microwave pin diode switches. S13-16A5811 is high performance 8.4 GHz to 10.2 GHz Absorptive design with low insertion loss of 3.0 dB max. The switch is phase and amplitude matched.

### Applications

- Military Radar, Radio and ECM
- Test Instrumentation
- Telecom Infrastructure
- Microwave Radio & VSAT



### Electrical Specifications

Frequency	8.4 to 10.2 GHz
Insertion Loss	3.0 dB Max
Amplitude Match	±0.5 dB (port to port)
Phase Match	±5 degree (port to port)
Isolation	60 dB Min
VSWR	1.8:1 Max
Switching Speed	T (On) - 50% TTL to 90% RF Voltage : 100ns T (Off) - 50% TTL to 10% of RF Voltage : 100 ns Port to Port Switching Speed : 100ns Typ
Switching Rate	PRF: 4 MHz Max
Impedance	50 Ohm
Power Input	+20 dBm CW
Survival Power	+30 dBm CW
Control	TTL Binary Coded 4 controls
Power Supply	+5 V @ 300 mA Max

S2D Microwave, Inc. reserves all the rights to change any specification without notice. Contact S2D Microwave, Inc. for the most recent specifications.

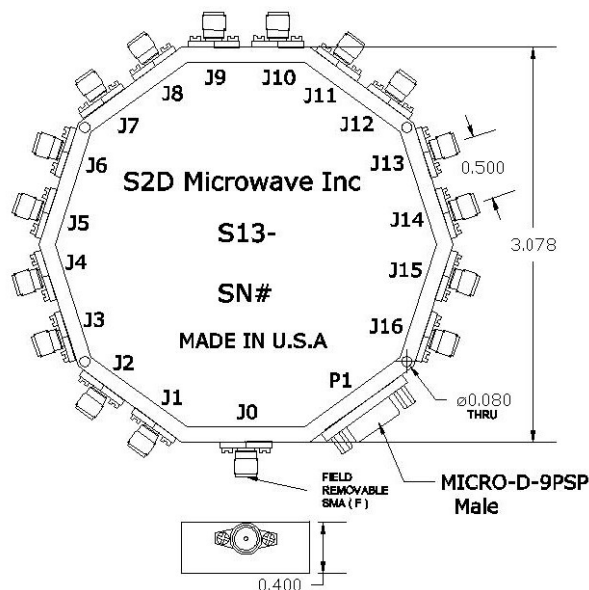
## Truth Table

Inputs				Port Selected
L4	L3	L2	L1	
0	0	0	0	J1
0	0	0	1	J2
0	0	1	0	J3
0	0	1	1	J4
0	1	0	0	J5
0	1	0	1	J6
0	1	1	0	J7
0	1	1	1	J8
1	0	0	0	J9
1	0	0	1	J10
1	0	1	0	J11
1	0	1	1	J12
1	1	0	0	J13
1	1	0	1	J14
1	1	1	0	J15
1	1	1	1	J16

0 - LOW VOLTAGE LEVEL

1 - HIGH VOLTAGE LEVEL

## Mechanical Specifications



Ground and Bias connector - 9MMD Mico-D

Material Connector: Passivated stainless steel

Material Contacts: Gold plated BeCu

Connector: Removable SMA(F) X 17

Control and DC Connectors : Solderable 6 pins

Mounting holes DIA 80 mil X 4 places

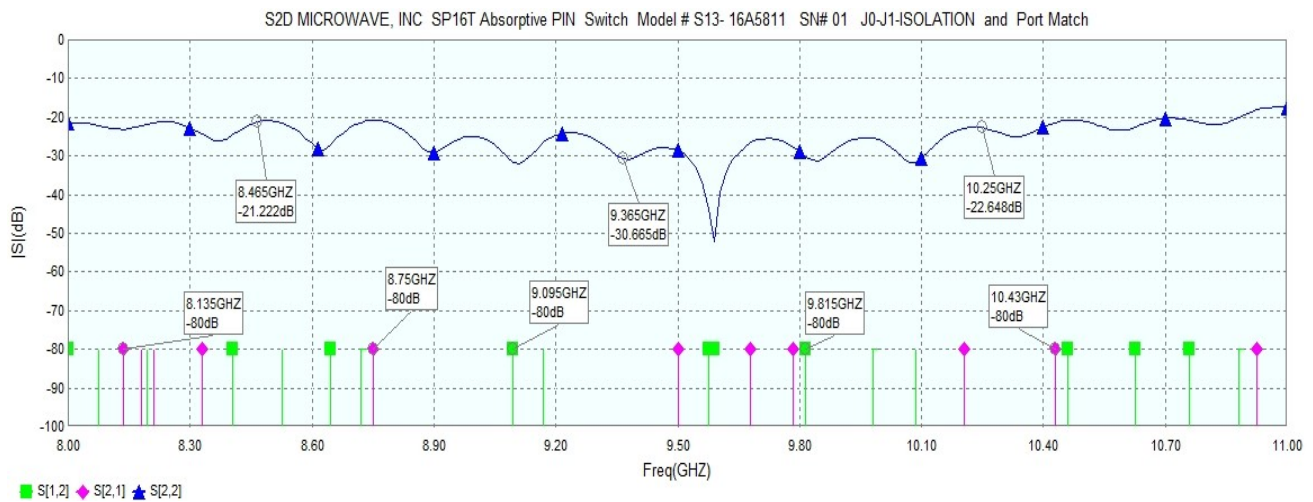
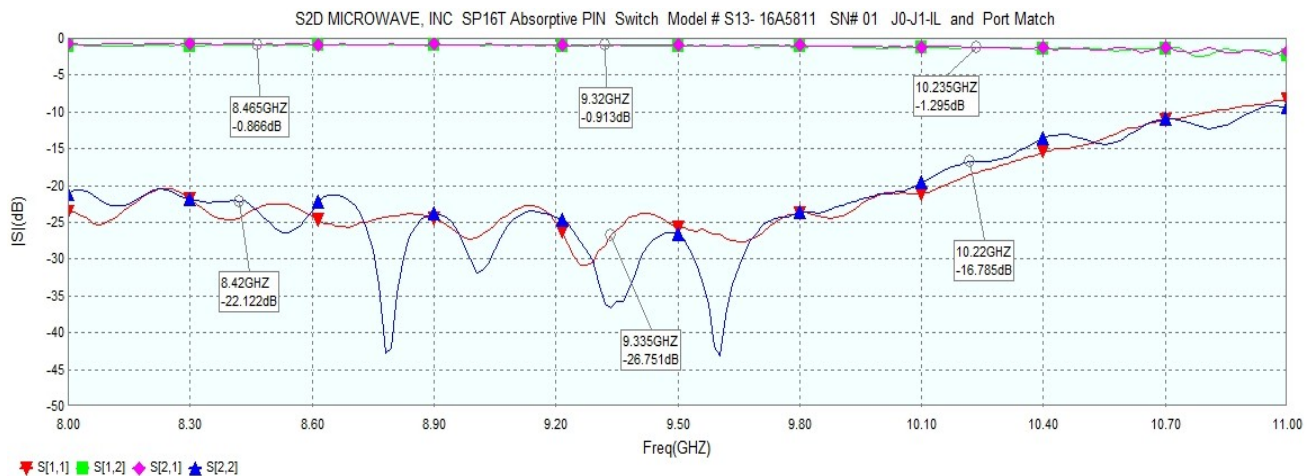
Plating: Electroless Nickel

Operating Temperature: -40 °C to +85 °C

Operating Temperature: -65 °C to +125 °C

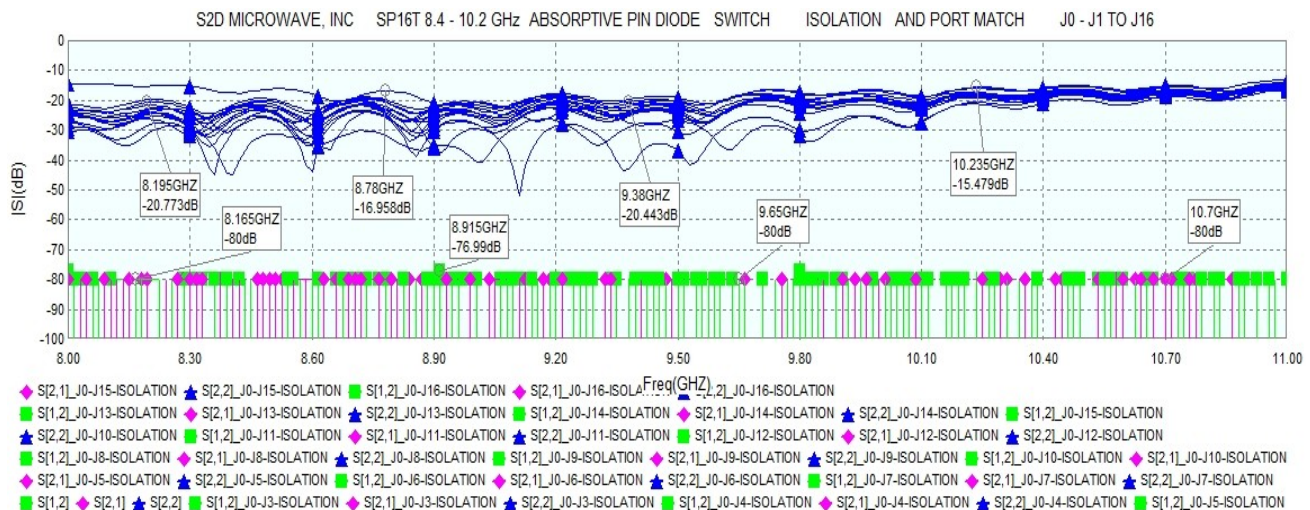
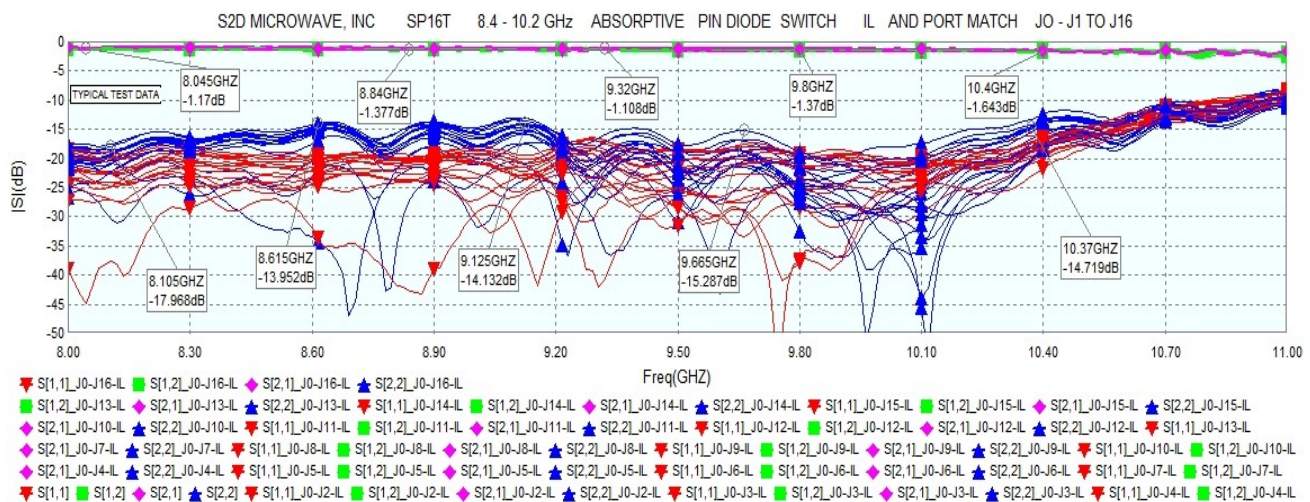
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## Typical Performance



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## Switching Speed Measurement

