

RF Switches

ATM manufactures a selection of switches. Readings are based on power flowing through an "on" Switch. When power is "off" switch is reflective. Please call us with your requirements and discuss your needs with one of our design engineers.

Pin Diode Solid State Switches

GENERAL SPECIFICATIONS:

FREQUENCY:

0.5 - 18.0 GHz

RF POWER:

+10 dBm spec compliant

+30 dBm survival (CW)

PEAK POWER:

75 watt, 1 μ s pulse width



Type	SP1T Reflective	SP2T Reflective	SP3T Reflective	SP4T Reflective
	(Click on Model Numbers below for Outline drawings)			
Model No.	S1517D	S2317D	S3317D	S4317D
Insertion Loss	2.5dB	2.5dB	3.0dB	3.0dB
Isolation	0.5-2GHz 37dB	2-18GHz 80dB	60dB	55dB
VSWR Input*	1.8:1 max	2.0:1 max	2.0:1 max	2.0:1 max
VSWR Output*	1.8:1 max	2.0:1 max	2.0:1 max	2.0:1 max
Switching Speed (off/on)	20 ns max (50% TTL to 90% RF)	250 ns max (50% TTL to 10% RF)	250 ns max (50% TTL to 10% RF)	250 ns max (50% TTL to 10% RF)
Switching Speed (on/off)	20 ns max (50% TTL to 90% RF)	250 ns max (50% TTL to 10% RF)	250 ns max (50% TTL to 10% RF)	250 ns max (50% TTL to 10% RF)
Control Logic TTL	1 line, logic 1 path on (I.L.)	2 line, logic 1 path on (I.L.)	3 line, logic 1 path on (I.L.)	4 line, logic 1 path on (I.L.)
DC Power	+15VDC at 40 mA -15VDC at 40 mA	+5VDC at 40 mA -15VDC at 40 mA	+5VDC at 60 mA -15VDC at 40 mA	+5VDC at 150 mA -15VDC at 50 mA
Operating Temp	- 45°C to + 85°C	- 45°C to + 85°C	- 45°C to + 85°C	- 45°C to + 85°C

Electromechanical Switches

Single-Pole/Double-Throw

Model No.	S2810H*
Actuating Voltage:	24-32 VDC (28 VDC nominal)
Actuating Current:	160 mA max at 28 VDC and 72 F
Impedance:	50 ohms
Switching Time:	15 ms max
Operating Mode:*	Failsafe
Operating Temp:	-35 °C to +85 °C
Operating Life:	1,000,000 cycles
Connectors:	SMA-(F) Standard



* For latching type with contact indicators add **/L/C** to Model Number, specifications match failsafe model.

Example: **S2810H** becomes: **S2810H/L/C** when specifying Latching capability and Indicator Contacts.

See Outline dwg's for more information: model **S2810H** model **S2810H/L/C**

Model S2810H Specifications

Freq (GHz)	VSWR (max)	Insertion Loss (max)	Isolation (min)	RF Power CW(W)** Low - High Freq.
DC - 3	1.2:1	0.2dB	80dB	200 - 75
3 - 8	1.3:1	0.3dB	70dB	75 - 35
8 - 12	1.4:1	0.4dB	65dB	35 - 25
12.4 - 18	1.5:1	0.5dB	60dB	25 - 10
18 - 22	1.6:1	0.6dB	55dB	10

** With 50 % or less duty suggested peak power is 3 x CW power.