

# SP4T SWITCH

## MODEL 310-021004-001

Available as: 2.24" x 0.90" x 0.40" Field Removable  
SMA Connectorized Housing

### Features

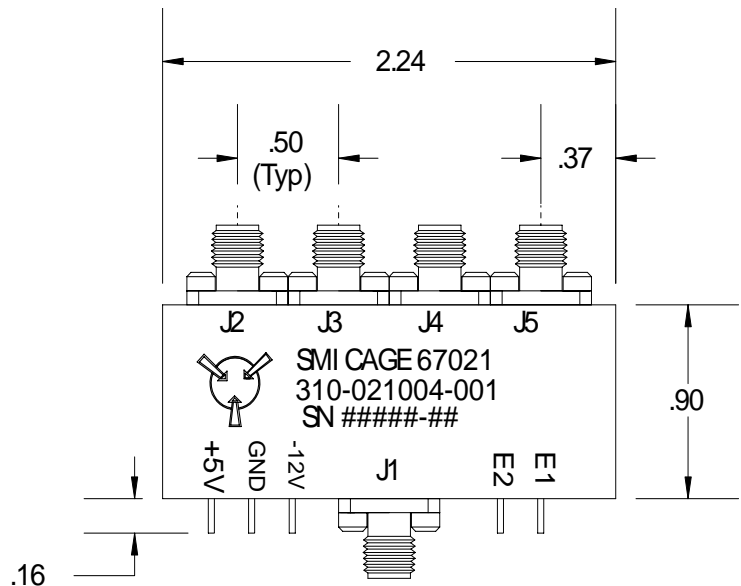
- Absorptive SP4T Switch
- Wide Bandwidth: 2 to 8 GHz
- Fast Switching Speed: 100 ns Typical
- Integral TTL Driver
- Operating Temp.: -55 °C to + 85 °C
- Environmental Screening Available

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
Storage Temperature ..... -65°C to + 125 °C  
Operating Case Temperature ..... + 125 °C  
DC Voltage ..... + 6.0 / -15 Volts  
Continuous RF Input Power ..... +30 dBm

### Specifications

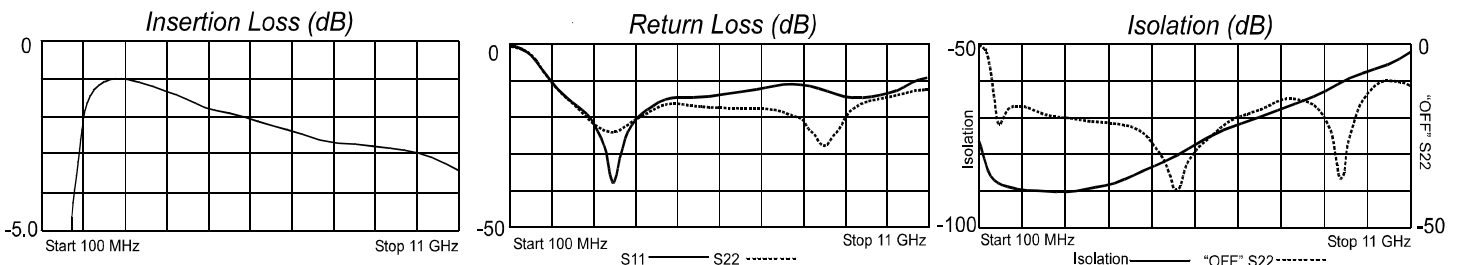
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency Range	2 - 8 GHz	2 - 8 GHz
Insertion Loss (dB)		
2 - 4 GHz	1.6	2.0 Max.
4 - 8 GHz	2.5	3.0 Max.
8 - 10 GHz	3.0	3.5 Max.
Isolation (dB)		
2 - 4 GHz	85	80 Min.
4 - 8 GHz	70	65 Min.
8 - 10 GHz	60	55 Min.
VSWR:		
Input	1.5:1	1.8:1 Max.
Output "ON"	1.5:1	1.8:1 Max.
Output "OFF"	1.5:1	1.8:1 Max.
RF Leakage (dB)	80	-
Isolation RF to / from DC (dB)	-	60 Min.
Isolation RF to / from Control (dB)	-	60 Min.
Switching Speed (50% TTL to 90% RF) (nsec)	100	-
DC (Vdc)	+5 / -12	+5 / -12
Bias (mA)	+50 / -40	+80 / -40
Input 1 dB Compression (dBm)	-	+27 Min.
Intercept Points (dBm)		
2nd Order IP (Input)	-	+40 Min.
3rd Order IP (Input)	-	+37 Min.



### Truth Table

TTL Control Input		Switch Position
TTL1	TTL2	RF1 to RF2
0	0	J1 to J2
0	1	J1 to J3
1	0	J1 to J4
1	1	J1 to J5

### Typical Performance Data



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