

# SP5T SWITCH

## MODEL 310-021005-001

Available as: 2.74" x 0.90" x 0.40" Field Removable SMA Connectorized Housing

### Features

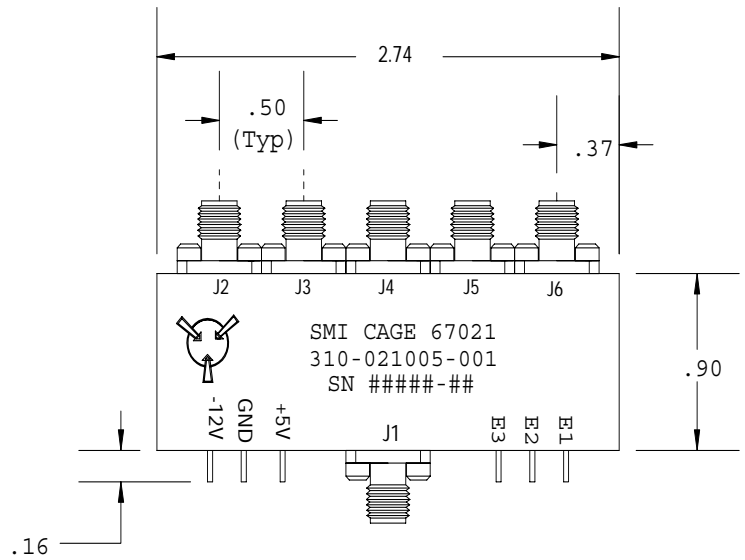
- Channelized SP5T Switch
- Wide Bandwidth: 10 MHz to 22 GHz
- Fast Switching Speed: 100 ns Typical
- Integrated TTL Driver
- Operating Temp.: -55 °C to +85 °C
- Environmental Screening Available

### 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

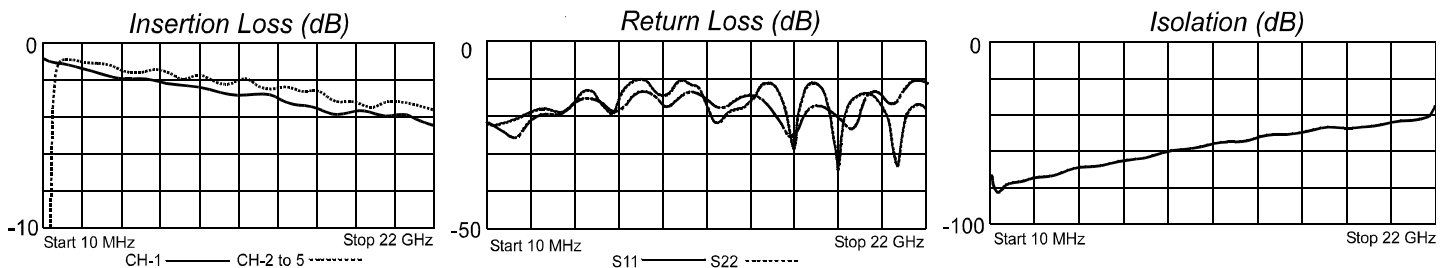
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency Range	10 MHz - 22 GHz	10 MHz - 22 GHz
Insertion Loss (dB)		
0.010 - 2.0 GHz	1.3	1.65 Max.
2.0 - 4.5 GHz	1.4	1.8 Max.
4.5 - 9.0 GHz	1.5	2.0 Max.
9.0 - 18.0 GHz	2.0	3.5 Max.
18.0 - 22.0 GHz	3.0	3.6 Max.
Isolation (dB)		
0.010 - 2.0 GHz	73	70 Min.
2.0 - 4.5 GHz	75	70 Min.
4.5 - 9.0 GHz	65	55 Min.
9.0 - 18.0 GHz	50	44 Min.
18.0 - 22.0 GHz	40	35 Min.
VSWR	1.5:1	1.8:1 Max.
RF Leakage (dB)	75	-
Isolation RF to / from DC (dB)	-	60 Min.
Isolation RF to / from Control (dB)	-	60 Min.
Switching Speed (nSec) (50% TTL to 10/90%RF)	100	-
DC (Vdc)	+5 / -12	+5 / -12
Bias (mA)	+150 / -50	+200 / -100
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	TTL3	RF1 to RF2
0	0	0	J1 to J2
0	0	1	J1 to J3
0	1	0	J1 to J4
0	1	1	J1 to J5
1	0	0	J1 to J6

### Typical Performance Data



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