

Standard Custom ElectroMechanical Switches

Stocked EM **Standard EM** Custom EM Standard PIN Multi-Throw PIN High Power PIN Switched Attenuators Switched Filter Banks Limiters

Series 093-103 - SP9T-SP10T / DC-8 GHz T, TNC



Features

- RF Impedance: 50 ohms nominal
- Actuating Voltage*: 28Vdc
- Actuating Current* Normally Open: 180 mA (max)
- Actuating Current* Latching: (n)1 x 100 mA
- Actuating Current* DA: 400 mA
- Switching Time: 20ms (max)
- Switching Sequence: Break Before Make
- Operating Ambient Temperature: -35°C to +70°C
- Operating Life: 1 Million Cycles per Position
- Designed to Meet MIL-S-3928

RF Performance

Frequency Range (GHz)	DC-3	3-8
VSWR (Max)	1.3:1	1.5:1
Insertion Loss (Max dB)	0.3	0.5
Isolation (Min dB)	80	70

Options Available

GROUP 2 ACTUATION

- B - LATCHING
- C - LATCHING RESET
- D - NORM OPEN
- DA - NORM OPEN FAILSAFE TO POSITION 1

GROUP 3 OPTIONS

- 0 - NONE
- 1 - 50-OHM TERMINATION
- 2 - INDICATOR CIRCUITRY
- 3 - SUPPRESSION DIODES
- 4 - TTL LOGIC HIGH
- 7 - SELF-DE-ENERGIZING CIRCUITRY
- 9 - OTHER (SPECIFY)
- V - MOSFET DRIVER
- Y - BCD TTL DECODER

GROUP 4 RF CONNECTORS

- D - N
- E - TNC
- G - OTHER (SPECIFY)

GROUP 5 TERMINALS

- 1 - SOLDER (STANDARD)
- 2 - POWER CONNECTOR, FAST DISCONNECT (STANDARD)
- 3 - POWER CONNECTOR, FAST DISCONNECT (SUB MIN "D")
- 4 - SOLDER LOOP
- 5 - OTHER (SPECIFY)

GROUP 6 VOLTAGE

- B - 12 VDC
- C - 24 VDC
- D - 28 VDC
- E - 48 VDC
- G - OTHER (SPECIFY)
- H - 15 VDC
- I - 18 VDC

GROUP 7 FREQUENCY

- 0 - DC - 1 GHz
- 1 - DC - 3 GHz
- 2 - DC - 8 GHz
- 7 - OTHER (SPECIFY)

GROUP 8 POLARITY

- A - COMMON PLUS
- B - COMMON MINUS
- C - NOT RELEVANT TO APPLICATION OR SWITCHES WITH LOGIC

GROUP 9 MOUNTING

- 0 - STANDARD MOUNTING HOLES
- 1 - BRACKET
- 2 - FLANGE
- 3 - OTHER (SPECIFY)

Switch Height (A) for Selected Options

DIM A ±.03	GROUP 2 ACTUATION	GROUP 3 OPTIONS
2.40	D, DA	0,3
3.28	B, C	2,3,7
3.28	D, DA	2,3
3.28**	B, C	2,3,4, or 5,7,Y
3.28**	D, DA	2,3,4 or 5,Y

* Specifications for 28 Vdc, 25°C

** Dimension for switches with Standard Narda Power Connector MS3112E-16-26P mating with MS3116E-16-26S.

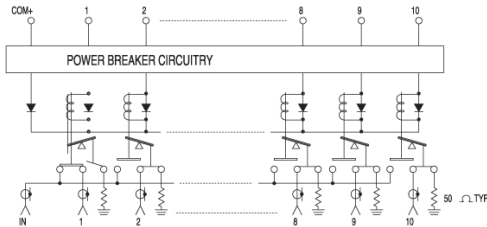
¹ n = # of positions

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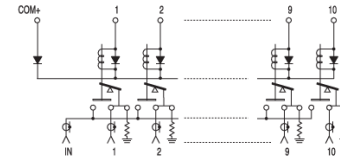
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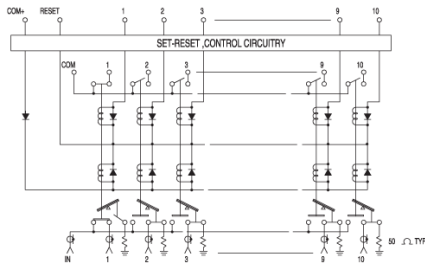
Typical Schematics



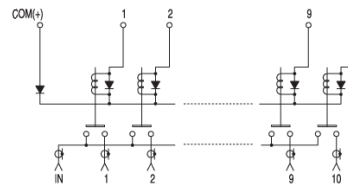
Latching SP10T switch with self de-energizing circuitry, control circuitry, suppression diodes and 50-ohm termination. Shown in position 1 (common plus). (B137)



Normally Open SP10T switch with suppression diodes and 50-ohm termination on each unused position (common plus). (D13)

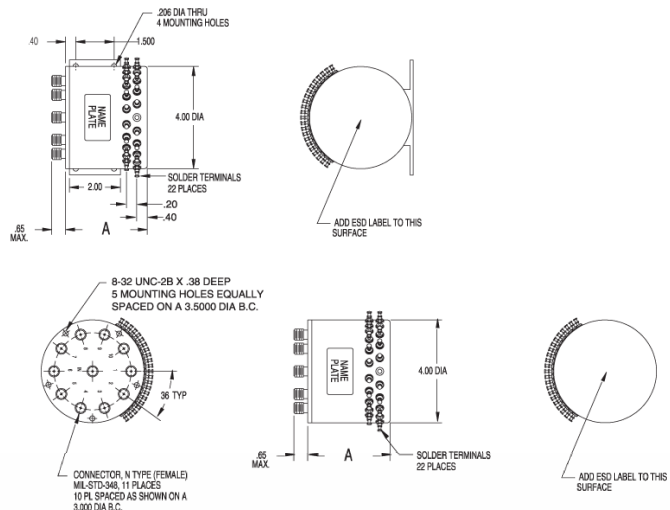
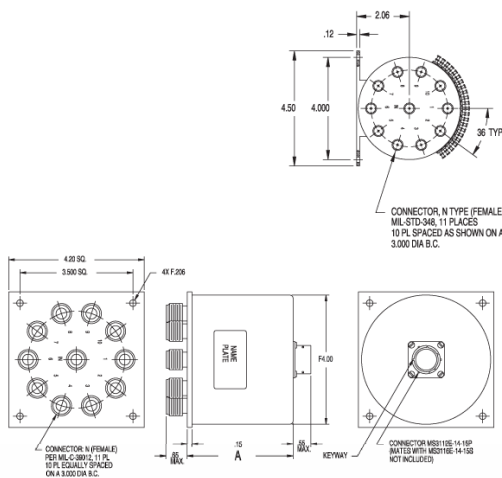


Latching SP10T switch with self de-energizing circuitry, reset function indicators and suppression diodes. Shown in position 1 (common plus). (B1237)



Normally Open SP10T switch suppression diodes (common plus). (D3)

Typical Outline Drawings



NOTE: For 093 Series Switches, eliminate position 10.