O SERIES 1P3T to 1P6T MULTI POSITION 50 OHM TERMINATED SWITCH DC-12.4 GHz \blacklozenge N, BNC, TNC

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The **O Series** features N or TNC connectors and a frequency range of DC to 12.4 GHz.

This series is available with latching self cut-off or normally open functions with terminations.

RF Impedance: **Temperature Range: Operating Life: Switching Time:** Switching Sequence: **Environmental:**

50 ohms nominal -35°C to +85°C ambient 1,000,000 cycles min. 15 mSec max. Break Before Make Designed in Accordance to MIL-DTL-3928 (Testing and **Operation Modes**)

SPECIFICATIONS

| Frequency | VSWR | Insertion Loss | Isolation |
|------------|--------|----------------|-----------|
| | (max.) | (dB max.) | (dB min.) |
| DC-3 GHz | 1.20 | 0.20 | 80 |
| 3-8 GHz | 1.35 | 0.35 | 70 |
| 8-12.4 GHz | 1.50 | 0.50 | 60 |

| Actuator Current | | | | |
|------------------|-------|-----------|-----------|----------|
| (typical) | 12Vdc | 12-15 Vdc | 20-24 Vdc | 24-30Vdc |
| Normally Open | 240mA | 300mA | 200mA | 140mA |
| Latching | 280mA | 353mA | 320mA | 215mA |

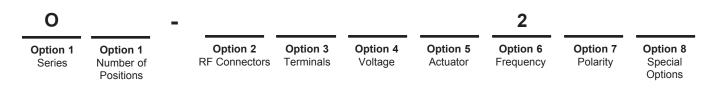
* If reduced coil current is required, please contact Factory

| AVAIL | ABLE | OPTIONS | |
|-------|------|---------|--|
| | | | |

| OPTION 2 RF CONNECTORS | OPTION 4 VOLTAGE | OPTION 5 ACTUATOR | OPTION 6 FREQUENCY | OPTION 8 SPECIAL OPTIONS |
|---------------------------|---------------------|---|-------------------------|-----------------------------|
| 1- N | 1 - 6 Vdc +/- 10% | Latching Self Cut-Off | 2 - DC to 12.4 GHz | L - TTL (High) |
| 2 - BNC | 2 - 12 Vdc +/- 10% | D - Diodes (USB Optional) | 7 | LL - TTL (Low) |
| 3 - TNC | (USB Optional) | E - Diodes, Indicators (USB Optional) | | 1 - Bracket |
| OPTION 3 | 3 - 24-30 Vdc | | OPTION 7 | F - Flange |
| TERMINALS | 4 - 48 Vdc +/- 10% | Normally Open | POLARITY | M - Manual Override |
| 1 - Solder | 5 - 110 Vac +/- 10% | G - Diodes, Indicators (USB Optional) | 0 - Not Applicable, USB | P - High Power Handling |
| Terminals | 6 - 12-15 Vdc | H - Indicators | 8 - Positive Common | R - Reset (Latching Only) |
| 2 - Circular Connector | (USB Optional) | J - Diodes (USB Optional) | 9 - Negative Common | C- BCD |
| 4 - Sub Miniature | 7 - 18-20 Vdc | K - Standard | | T - Termination |
| D-Shell | 8 - 20-24 Vdc | N - Failsafe to Position 1 - Standard | | U- USB |
| Connector | | R - Failsafe to Position 1 - Diodes | | |
| 5 - USB | | S - Failsafe to Position 1 - Diodes, Indicators | | |

Please Note: USB integration can only be applied to Voltage Options 12Vdc, & 15Vdc, Polarity Option # 3, and Terminals Option # 3.

The switch has a mini-USB socket on the enclosure interface which provides communication between switch and computers. Additionally, the enclosure also has a Molex socket for 12Vdc connection, which is required to power RF switch. The switch is accompanied with a CD driver, a 3 ft. USB cable and a 12 Vdc AC/DC adapter.



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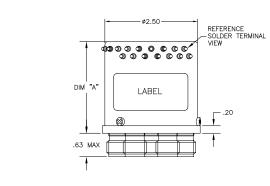
| | DC TERMINAL FUNCTION | | | | | | | | | | | | | | |
|-----|----------------------|-------------|---------|-------------|--------|-----|----------------|---------|-----|----------------|--|--------|----------------|--------|-------------|
| | | LATC | HING | | | | NORMAL | LY OPEN | | | NORMALLY OPEN - FAILSAFE TO POSITION 1 | | | | |
| PIN | D | D w/ TTL | E | E w/ TTL | J | к | J, K w/ TTL | G | Н | G, H w/ TTL | Ν | R | N, R w/ TTL | S | S w/ TTL |
| 1 | NOTE #1 | NOTE #1 | NOTE #1 | NOTE #1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 2 | COM+/- | +A | COM+/- | +A | COM+/- | COM | +A | COM+/- | COM | +A | COM | COM+/- | +A | COM+/- | +A |
| 3 | 1-/+ | -В | 1-/+ | -В | 1-/+ | 1 | -В | 1-/+ | 1 | -В | 2 | 2-/+ | -В | 2-/+ | -В |
| 4 | 2-/+ | 1 | 2-/+ | 1 | 2-/+ | 2 | 1 | 2-/+ | 2 | 1 | 3 | 3-/+ | 2 | 3-/+ | 2 |
| 5 | 3-/+ | 2 | 3-/+ | 2 | 3-/+ | 3 | 2 | 3-/+ | 3 | 2 | 4 | 4-/+ | 3 | 4-/+ | 3 |
| 6 | 4-/+ | 3 | 4-/+ | 3 | 4-/+ | 4 | 3 | 4-/+ | 4 | 3 | 5 | 5-/+ | 4 | 5-/+ | 4 |
| 7 | 5-/+ | 4 | 5-/+ | 4 | 5-/+ | 5 | 4 | 5-/+ | 5 | 4 | 6 | 6-/+ | 5 | 6-/+ | 5 |
| 8 | 6-/+ | 5 | 6-/+ | 5 | 6-/+ | 6 | 5 | 6-/+ | 6 | 5 | N/A | N/A | 6 | N/A | 6 |
| 9 | N/A | 6 | N/A | 6 | N/A | N/A | 6 | N/A | N/A | 6 | N/A | N/A | N/A | N/A | N/A |
| Α | N/A | N/A | COM | COM | N/A | N/A | N/A | COM | COM | COM | N/A | N/A | N/A | COM | COM |
| В | N/A | N/A | 1 | 1 | N/A | N/A | N/A | 1 | 1 | 1 | N/A | N/A | N/A | 1 | 1 |
| С | N/A | N/A | 2 | 2 | N/A | N/A | N/A | 2 | 2 | 2 | N/A | N/A | N/A | 2 | 2 |
| D | N/A | N/A | 3 | 3 | N/A | N/A | N/A | 3 | 3 | 3 | N/A | N/A | N/A | 3 | 3 |
| E | N/A | N/A | 4 | 4 | N/A | N/A | N/A | 4 | 4 | 4 | N/A | N/A | N/A | 4 | 4 |
| F | N/A | N/A | 5 | 5 | N/A | N/A | N/A | 5 | 5 | 5 | N/A | N/A | N/A | 5 | 5 |
| G | N/A | N/A | 6 | 6 | N/A | N/A | N/A | 6 | 6 | 6 | N/A | N/A | N/A | 6 | 6 |

NOTE#1: RESET IF (R) OPTION IS SELECTED, OTHERWISE N/A

| | SCHEMATICS | | | | | | | | | | | | | | |
|------|---------------|----|----|----|----|-----|-----------|-----------|----------|----|----|----|----|----|----|
| | Pages 139-143 | | | | | | | | | | | | | | |
| FIG. | 25 | 26 | 25 | 26 | 29 | 29 | 30 | 29 | 29 | 30 | 33 | 33 | 34 | 33 | 34 |
| | | | | | | | | | | | | | | | |
| | | | | | | OUT | LINE DRAW | ING DIMEN | SION "A" | | | | | | |

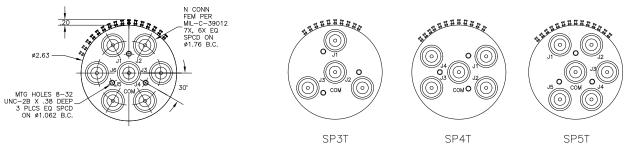
| OUTLINE DRAWING DIMENSION A | | | | | | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2.47" | 3.20" | 2.47" | 3.20" | 1.97" | 1.97" | 2.88" | 2.47" | 2.47" | 3.20" | 1.97" | 1.97" | 2.88" | 2.47" | 3.20" |

DC TERMINAL VIEW



FRONT VIEW





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