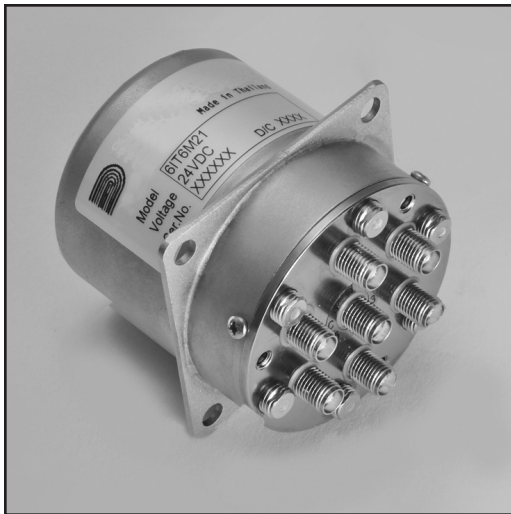


IT/ITE SERIES
SP3T to SP6T MULTI POSITION
50 OHM TERMINATED SWITCH
DC-22 GHz ◆ SMA

Click Here to Request Quote



The **IT Series** features SMA connectors and a frequency range of DC to 18 GHz. Operation is by individual solenoids and 50 ohm internal terminations.

The **ITE Series** also features SMA connectors and a frequency range of DC to 22 GHz.

Both series are available with normally open, latching self cut-off, or pulse latching functions. This switch is used in systems where RF sources cannot tolerate an open circuit load condition.

| | |
|-------------------------------|------------------------|
| Weight (max.): | 10 oz |
| RF Impedance: | 50 ohms nominal |
| Operating Temperature: | -25°C to +65°C ambient |
| Operating Life: | 1,000,000 cycles min. |
| Switching Sequence: | Break Before Make |

SPECIFICATIONS

| Frequency | VSWR (max.) | Insertion Loss (dB max.) | Isolation (dB min.) |
|-----------|-------------|--------------------------|---------------------|
| DC-4 GHz | 1.20 | 0.30 | 75 |
| 4-8 GHz | 1.30 | 0.35 | 70 |
| 8-12 GHz | 1.40 | 0.40 | 65 |
| 12-18 GHz | 1.50 | 0.50 | 60 |
| 18-22 GHz | 1.60 | 0.60 | 60 |

| Actuator Current (typical) | 12Vdc | 15 Vdc | 24 Vdc | 28Vdc |
|----------------------------|-------|--------|--------|-------|
| Latching | 300mA | 240mA | 160mA | 145mA |
| Normally Open | 380mA | 295mA | 190mA | 170mA |

* If reduced coil current is required, please contact Factory.

| Position | NO | NC | Latching |
|-----------------------------|----|----|----------|
| Switching Time - mSec (Max) | 15 | 35 | 20 |

AVAILABLE OPTIONS

| OPTION 3 VOLTAGE | OPTION 4 ACTUATOR | | OPTION 5 POLARITY |
|---------------------|---------------------------------------|---|-------------------------------------|
| 1 - 12 Vdc | Latching Self Cut-Off | | 1 - Negative |
| 2 - 28 Vdc | G - Diodes | H - Diodes, Indicators | 2 - Positive |
| 3 - 15 Vdc | GY - Diodes with USB | HY - Diodes, Indicators with USB | 3 - Not Applicable / USB |
| 5 - Other | Low Input Drivers with: | High Input Drivers with: | OPTION 6 TERMINALS |
| 6 - 24 Vdc | J - Diodes | JH - Diodes | |
| 7 - 5 Vdc | K - Diodes, Indicators | KH - Diodes, Indicators | 1 - Solder Terminals |
| | JB - B C D, Diodes | JBH - B C D, Diodes | 2 - Circular Connector |
| | KB - B C D, Diodes, Indicators | KBH - B C D, Diodes, Indicators | 3 - Other (Specify) / USB |
| | Pulse Latching | | 4 - Sub Miniature D-Shell Connector |
| | T - Standard | R - Diodes | |
| | U - Diodes | S - Diodes, Indicators | |
| | V - Indicators | RB - B C D, Diodes | |
| | W - Diodes, Indicators | SB - B C D, Diodes, Indicators | |
| | | N - Indicators | |
| | | P - Diodes, Indicators | |
| | | PY - Diodes, Indicators with USB | |
| | | MY - Diodes | |

ADDITIONAL OPTIONS

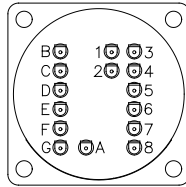
| OPTION 7 STANDARD OPTIONS |
|---|
| 1 - Moisture Seal |
| 2 - High Temperature (125° C) |
| 3 - Moisture Seal & High Temperature (125° C) |
| OPTION 8 BRACKETS |
| A - See Page 144 |

Please Note: USB integration can only be applied to Voltage Options 5Vdc, 12Vdc, & 15Vdc, Polarity Option # 3, and Terminals Option # 3. Schematics may include optional Indicator Contacts. If your Actuator Option does not include Indicator Contacts, omit them from the schematic.

IT/ITE

| | | | | | |
|------------------------------|---------------------------|----------------------------|-----------------------------|-----------------------------|------------------------------|
| Option 1 Positions | Option 2 Series | Option 3 Voltage | Option 4 Actuator | Option 5 Polarity | Option 6 Terminals |
|------------------------------|---------------------------|----------------------------|-----------------------------|-----------------------------|------------------------------|

TOP VIEW



Actual markings will reflect terminal functions, not letter or number designation as shown above.

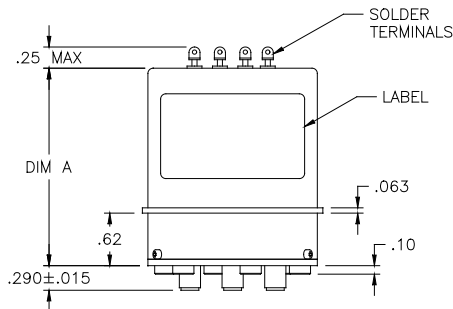
DC TERMINAL FUNCTIONS

| PIN | NORMALLY OPEN | | | LATCHING | | | |
|-----|---------------|---------|--------------------------------|----------|--------------------------------|---------|---------|
| | L, N | M, P | R, RH, RB, RBH, S, SH, SB, SBH | G, H | J, JH, JB, JBH, K, KH, KB, KBH | T, V | U, W |
| 1 | C | C+/- | +V SW | C+/- | +V SW | C+/- | C+/- |
| 2 | N/A | N/A | C RTN | N/A | C RTN | RESET | N/A |
| 3 | AV 1 | AV 1-/+ | L 1 or B C D 1 | AV 1-/+ | L 1 or B C D 1 | PV 1-/+ | PV 1-/+ |
| 4 | AV 2 | AV 2-/+ | L 2 or B C D 2 | AV 2-/+ | L 2 or B C D 2 | PV 2-/+ | PV 2-/+ |
| 5 | AV 3 | AV 3-/+ | L 3 or B C D 4 | AV 3-/+ | L 3 or B C D 4 | PV 3-/+ | PV 3-/+ |
| 6 | AV 4 | AV 4-/+ | L 4 | AV 4-/+ | L 4 | PV 4-/+ | PV 4-/+ |
| 7 | AV 5 | AV 5-/+ | L 5 | AV 5-/+ | L 5 | PV 5-/+ | PV 5-/+ |
| 8 | AV 6 | AV 6-/+ | L 6 | AV 6-/+ | L 6 | PV 6-/+ | PV 6-/+ |

SCHEMATICS

| Pages 132-137 | | | | | | | |
|---------------|-----|-----|----------|-----|----------|----------|----------|
| | M14 | M15 | M16, M17 | M18 | M19, M20 | M21, M22 | M21, M22 |

FRONT VIEW



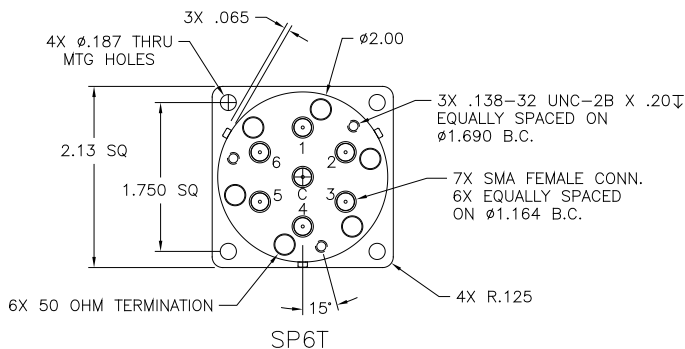
INDICATORS

| PIN | A | B | C | D | E | F | G |
|-----|-----|---|---|---|---|---|---|
| | COM | 1 | 2 | 3 | 4 | 5 | 6 |

See Page 158 for Legend of Terms and Tolerances

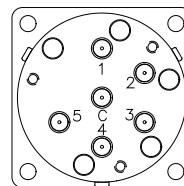
See Page 138 for Logic & BCD Truth Table

BOTTOM VIEW

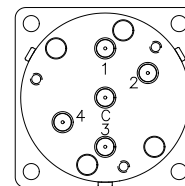


| AVAILABLE OPTIONS* | OUTLINE DRAWING DIMENSION "A" |
|--------------------|-------------------------------|
| L, T | 2.08 |
| G, H, W, U, V | 2.33 |
| J, JH, K, KH | 2.58 |
| JB, JBH, KB, KBH | 2.58 |
| M, N | 2.33 |
| P | 2.58 |
| R, RB, RBH, RH | 2.58 |
| S, SB, SBH, SH | 2.58 |

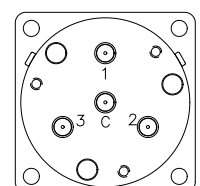
* Consult factory for Dimension "A" when multi pin connector is desired.



SP5T



SP4T



SP3T