Commercial   CCT-39
Multi-Throw Internal Terminations DC-18GHz
Latching

The CCT-39 Switch is a Internally Terminated broadband, multi-throw, electromechanical coaxial switch designed to switch a microwave signal from a common input to any of 3, 4, 5, or 6 outputs. The characteristic impedance is 50 Ohms. Internal terminations provide an impedence match for the unselected ports. The switches are small using the popular connector spacing on a 1.062" dia. circle. Each position has an individual actuator mechanism allowing random position selection. This also minimizes switching time.

Specifications

RF Contacts: Break before make

Actuator	Voltage (VDC) 20°C		12	15	28
	Latching Current (mA)		255	205	90
Reset Current (mA)	Positions	3	765	615	270
		4	1020	820	360
		5	1275	1025	450
		6	1530	1230	540

Switching Time: 20 msec max

Terminations: 50 Ohm 2 Watts CW max

Connectors: SMA (f)

Weight: 6 oz. max

Temperature Range: -40°C to +65°C (Operating)

The CCT-39 comes with a latching actuator. The latching switch remains in the last position selected when the switch is de-energized. STD dual command requires a reset pulse before a new selected position. A separate reset circuit allows all positions to be set to an open position. User must provide both reset (clear) and set (select new position) commands.

Shock: MIL-STD-202 Method 213, Condition D (500G Non Operating)

Vibration: MIL-STD-202 Method 214, Condition D (10G RMS Non Operating)

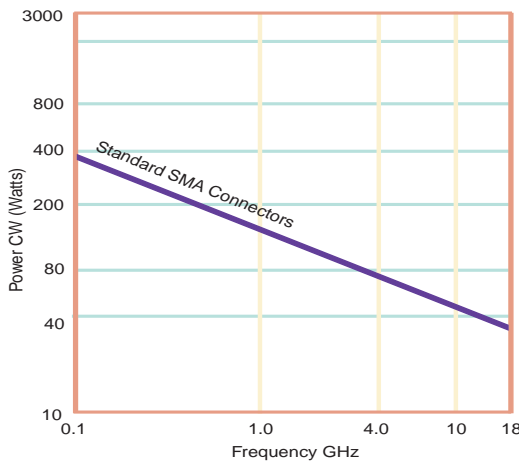**Humidity:** Moisture Seal Available

Typical Contact Life: 5 Million Cycles
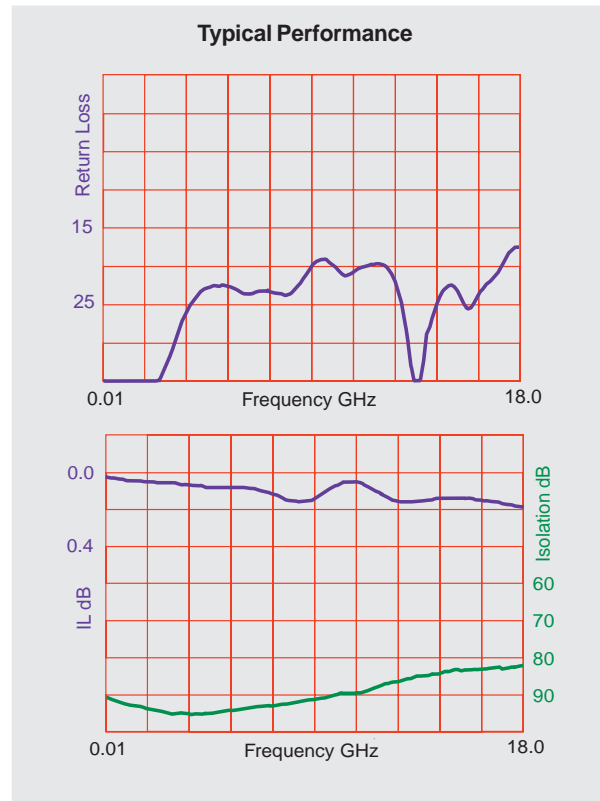
Insertion Loss Repeatability (1 Million Cycles):

DC to 6 GHz: 0.05 dB

DC to 20 GHz: 0.1 dB

RF Power Handling (Non-Terminated)

Specifications	DC-6 GHz	6-12 GHz	12-18 GHz
VSWR (max)	1.25:1	1.40:1	1.50:1
Insertion Loss (min)	0.20 dB	0.40 dB	0.50 dB
Isolation (max)	70.0 dB	60.0 dB	60.0 dB

TTL

Vsw COM   LOGIC INPUT   RESET
J   C   1   2   3   4   5   6   R
TTL CONTROL

RF IN   POS1 POS2 POS3 POS4 POS5 POS6   50 OHM TERMINATION

Analog

POWER INPUT TERMINATION

COM−   SET +   RESET +
−C   1   2   3   4   5   6   R

RF IN   POS1 POS2 POS3 POS4 POS5 POS6   50 OHM TERMINATION

Indicators

COM   RESET
7   1   2   3   4   5   6

INDICATOR TERMINALS
13   8   9   10   11   12

RF IN   POS1 POS2 POS3 POS4 POS5   50 OHM TERMINATION

14X SOLDER TERMINALS SOLDER WIRE USING SN63, MAXIMUM TEMP 210°C FOR NO MORE THAN 5 SEC.

SP3T

3
IN   1
2

SP5T

4
3   IN   5
2   1

SP6T

4X ø.172 THRU MOUNTING HOLES

2.25

30° TYP
1.800

4
3   IN   5
2   6
1

.25   .22   .22   ø1.062

1.800

SP4T

4   IN   1
3   2

ø 2.00   .28 MAX

H

.12
POS5   POS.6
.27 MAX.

MARKING

H = 2.25 STD Model
H = 2.50 TTL Model
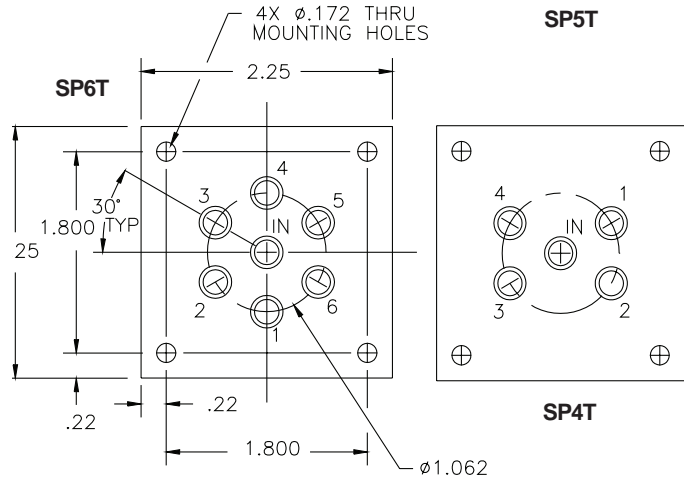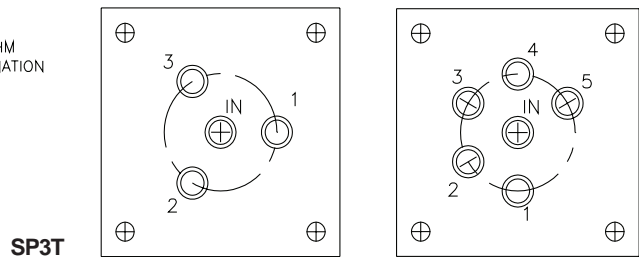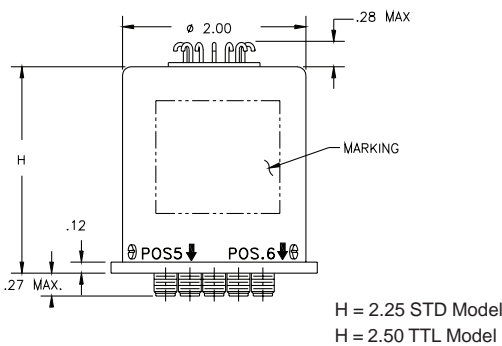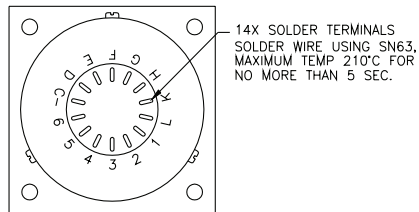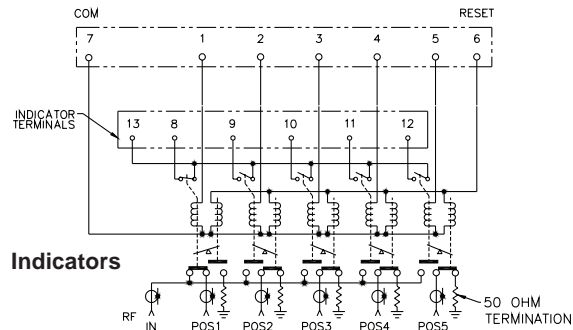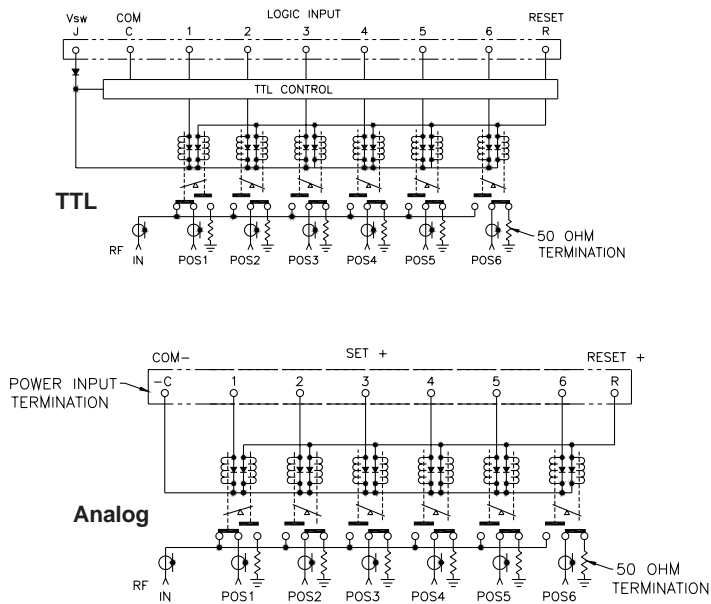
Part Numbering System for CCT-39 (Latching)

CCT-39 S 6 5 O - T

Series ——————————————

Connectors ——————————————

Actuator Voltage ——————————————

Number of Switch Positions ——————————————

Actuator Type ——————————————
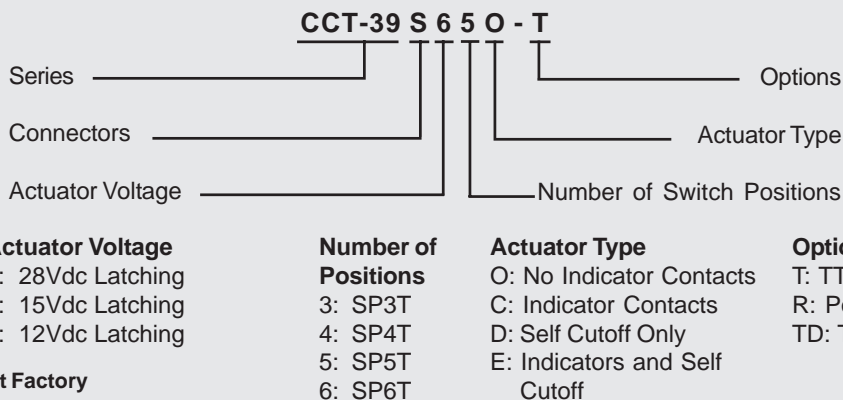
Options ——————————————

Connector	Actuator Voltage	Number of Positions	Actuator Type	Options
S: SMA Female	6: 28Vdc Latching	3: SP3T	O: No Indicator Contacts	T: TTL Drivers with Diodes
	7: 15Vdc Latching	4: SP4T	C: Indicator Contacts	R: Positive + Common
	8: 12Vdc Latching	5: SP5T	D: Self Cutoff Only	TD: TTL Driver with Decoder
		6: SP6T	E: Indicators and Self Cutoff	

For other options contact Factory