

# Elite CT-39

## Multi-Throw Internal Terminations DC-22GHz Latching



The CT-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 impedance 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

<b>RF Contacts:</b>	Break before make				
<b>Actuator</b>	Voltage (VDC) 20°C	12	15	28	
	Latching Current (mA)	255	205	90	
	Positions				
Reset Current (mA)		3	765	615	270
		4	1020	820	360
		5	1275	1025	450
		6	1530	1230	540

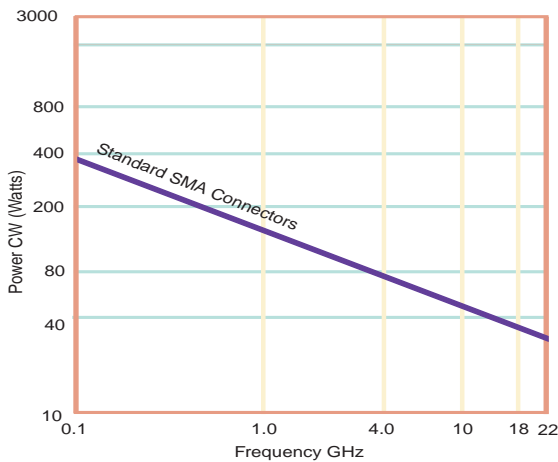
- Switching Time:** 20 msec max
- Terminations:** 50 Ohm 2 Watts CW max
- Connectors:** SMA (f)
- Weight:** 6 oz. max
- Temperature Range:** -55°C to +85°C (Operating)

The CT-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.

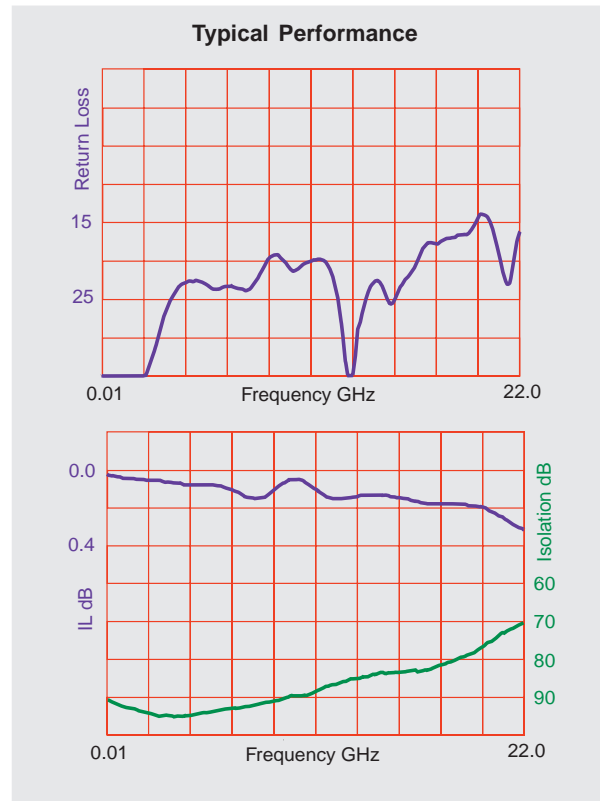
- Shock:** MIL-STD-202 Method 213, Condition D (500G Non Operating)
- Vibration:** MIL-STD-202 Method 214, Condition D (10G RMS Non Operating)
- Humidity:** Moisture Seal Available

- 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	18-22 GHz
VSWR (max)	1.25:1	1.40:1	1.50:1	1.80:1
Insertion Loss (min)	0.20 dB	0.40 dB	0.50 dB	0.80 dB
Isolation (max)	70.0 dB	60.0 dB	60.0 dB	50.0 dB



Specifications subject to change without notice.

www.teledynecoax.com  
email: coax@teledyne.com

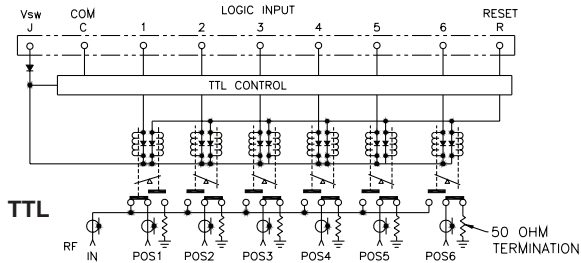
Tel: (800) 351-7368  
10/2007

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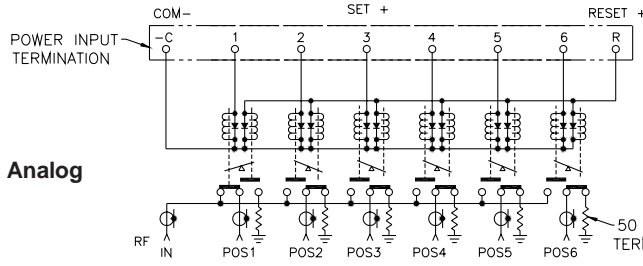
## Multi-Throw

### Internal Terminations DC-22GHz

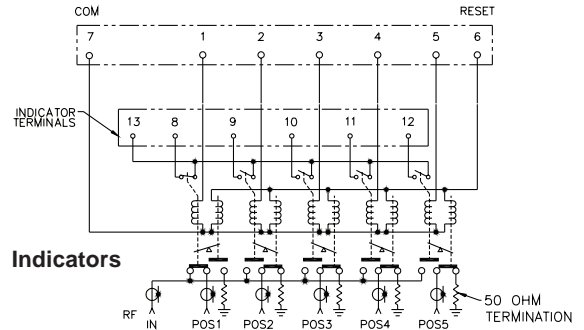
### Latching



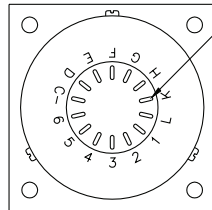
TTL



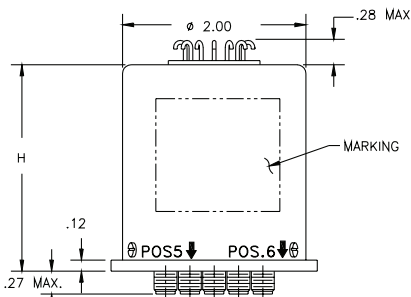
Analog



Indicators

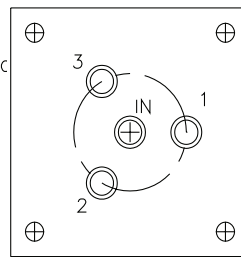


14X SOLDER TERMINALS  
SOLDER WIRE USING SN63,  
MAXIMUM TEMP 210°C FOR  
NO MORE THAN 5 SEC.

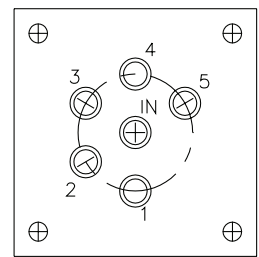


H = 2.25 STD Model  
H = 2.50 TTL Model

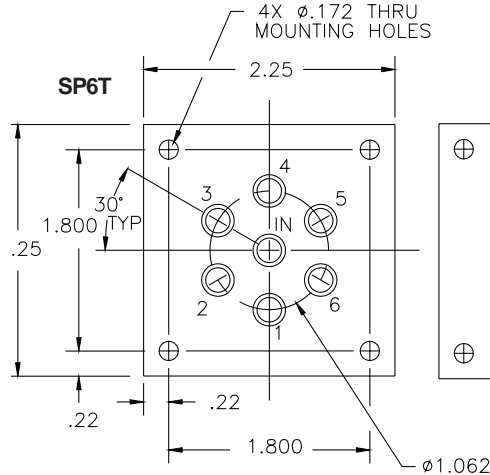
SP3T



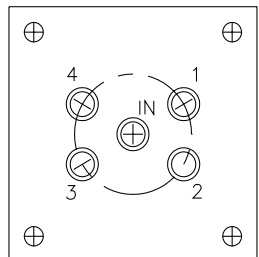
SP5T



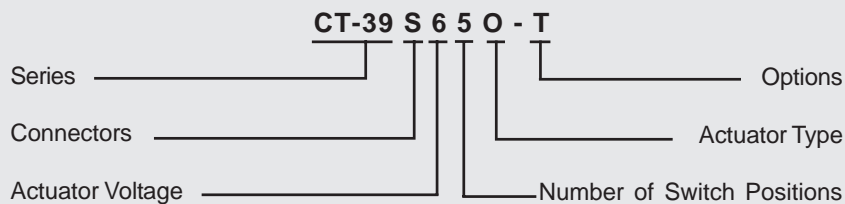
SP6T



SP4T



### Part Numbering System for CT-39 (Latching)



**Connector**  
S: SMA Female

**Actuator Voltage**  
6: 28Vdc Latching  
7: 15Vdc Latching  
8: 12Vdc Latching

**Number of Positions**  
3: SP3T  
4: SP4T  
5: SP5T  
6: SP6T

**Actuator Type**  
O: No Indicator Contacts  
C: Indicator Contacts  
D: Self Cutoff Only  
E: Indicators and Self Cutoff

**Options**  
T: TTL Drivers with Diodes  
R: Positive + Common  
TD: TTL Driver with Decoder

For other options contact Factory



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