



High Frequency Miniature SPDT Switches

Inboard & Outboard Mounting

CCR-33 Series SMA Connectors

Description

The CCR-33 Switch is a broad-band, SPDT, electromechanical, coaxial switch designed to switch a microwave signal from a common input to either of two outputs. The characteristic impedance is 50 Ohms. The switches are small with connector spacing compatible with SMA connectors.

The CCR-33 series switch is offered with either a failsafe or latching actuator.

This design is compatible with the two most common mounting hole patterns. The CCR-33 series switch is interchangeable with a variety of switches.

Specifications

RF Contacts:

Break before make

Actuator Voltage:

24-30 VDC; 12, 15, 20 VDC

Actuator Current:

Failsafe:

90 mA max @ 28 VDC and 20°C

Latching:

65 mA max @ 28 VDC and 20°C

Switching Time:

Failsafe: 20 msec max

Latching: 10 msec max

Weight:

1.65 oz. max

Temperature Range:

-25°C to +65°C

Life:

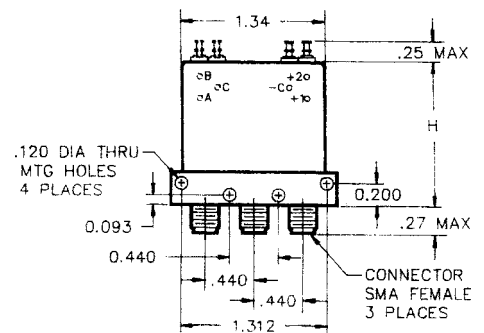
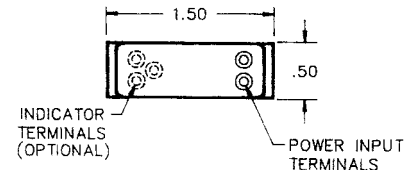
2 million cycles

RF Power Handling:

See Power Handling Capability graph

Optional Features

- Indicator Circuits
- Special Actuator Voltages
- TTL Compatible Drivers
- Self-Cutoff Circuits (latching only)



Standard width RF Body

H = 1.30 MAX. STD MODEL
H = 1.80 MAX. TTL MODEL

RF Performance

| Frequency | DC-6GHz (-506) | DC-12 GHz (-512) | DC-18 GHz (-518) |
|--------------------------|----------------|------------------|------------------|
| VSWR (maximum) | 1.25:1 | 1.40:1 | 1.50:1 |
| Insertion Loss (maximum) | 0.2 dB | 0.4 dB | 0.5 dB |
| Isolation (minimum) | 70 dB | 60 dB | 60 dB |

Specifications subject to change without notice

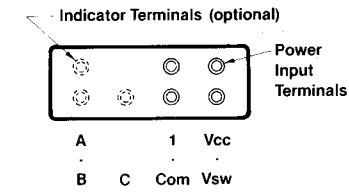
TELEDYNE ELECTRONIC TECHNOLOGIES
Microwave Electronic Components

www.teledynemicrowave.com
email: switches@teledyne.com

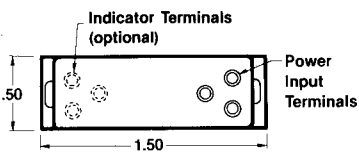
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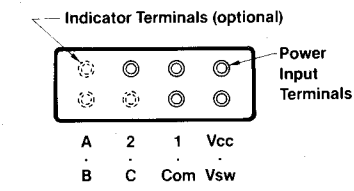
**Failsafe,
TTL Option**



Latching



**Latching,
TTL Option**



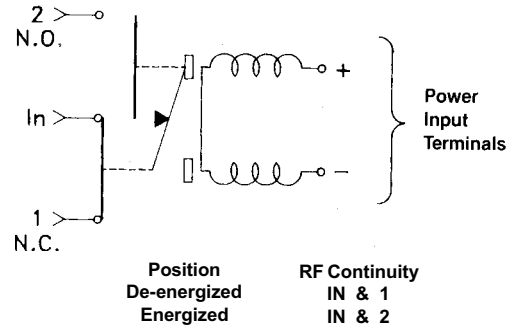
Model Number Table

| Actuator Type | Without Indicators | With Indicators |
|------------------------------|--------------------|-----------------|
| Failsafe | CCR-33S10 | CCR-33S1C |
| Latching without Self-Cutoff | CCR-33S60 | CCR-33S6C |
| Latching with Self-Cutoff | CCR-33S6D | CCR-33S6E |

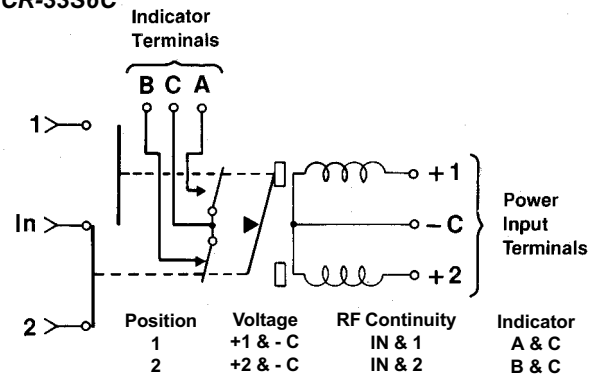
For TTL Drivers, add -T to the model number. All units have SMA connectors.

For DC-6 GHz, add - 506 to the model number.
 For DC-12 GHz, add - 512 to the model number.
 For DC-18 GHz, add - 518 to the model number.

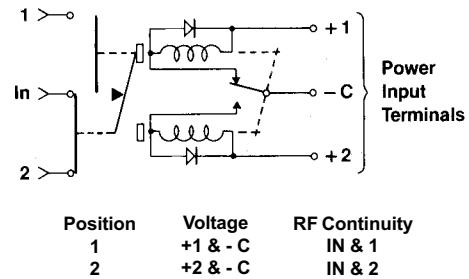
CCR-33S10



CCR-33S6C



CCR-33S6D



CCR-33S6E

