



PART NUMBER	DESCRIPTION
CCR-33K	Miniature DC–33.5GHz Latching SPDT Coaxial Switch
<p>Series CCR-33K switches are broadband SPDT, electromechanical coaxial switches designed for application frequencies above 26.5GHz. The CCR-33K offers excellent insertion loss repeatability across the full bandwidth and ultra low intermodulation (PIM) characteristic. The switch life is characterized at 5 million cycles. The CCR-33K is designed to switch a microwave signal from a common input to either of the two outputs. The characteristic impedance is 50 Ohms. The switches are small with connector spacing compatible with K connectors. The design is compatible with the two most common mounting hole patterns.</p>	

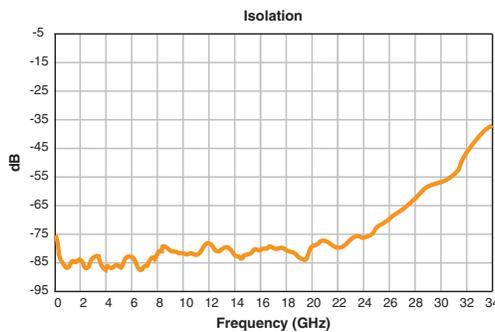
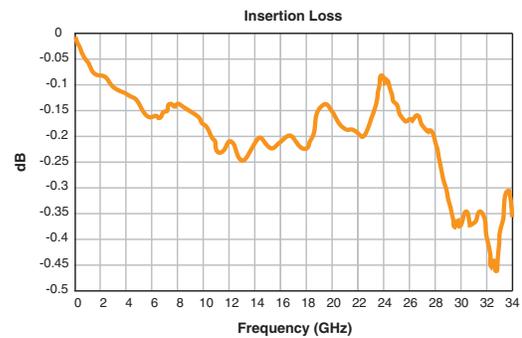


ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS	
Operating Temperature	-25°C to 65°C
Vibration (MIL-STD-202 Method 214, Condition D, non-operating)	10 g's RMS
Shock (MIL-STD-202 Method 213, Condition D, non-operating)	500 g's
Life	5,000,000 cycles
RF Power	2W CW carry only
Connector Type	K or 2.92 mm
Humidity (Moisture Seal)	Available
Weight	1.65 oz. (46.78g) (max.)

ELECTRICAL CHARACTERISTICS	
Form Factor	SPDT, break before make
Frequency Range	DC–33.5 GHz
Characteristic Impedance	50 Ω
Operate Time	20 ms (max.)
Release Time	20 ms (max.)
Actuation Voltage Available	12 15 28 V
Actuation Current	200 160 90 mA

PERFORMANCE CHARACTERISTICS					
PARAMETER	DC–6 GHz	6–12 GHz	12–18 GHz	18–26.5 GHz	26.5–33.5 GHz
Insertion Loss, dB	0.20	0.40	0.50	0.60	0.75
Isolation, dB	70	70	70	50	40
VSWR	1.20:1	1.40:1	1.50:1	1.50:1	1.70:1

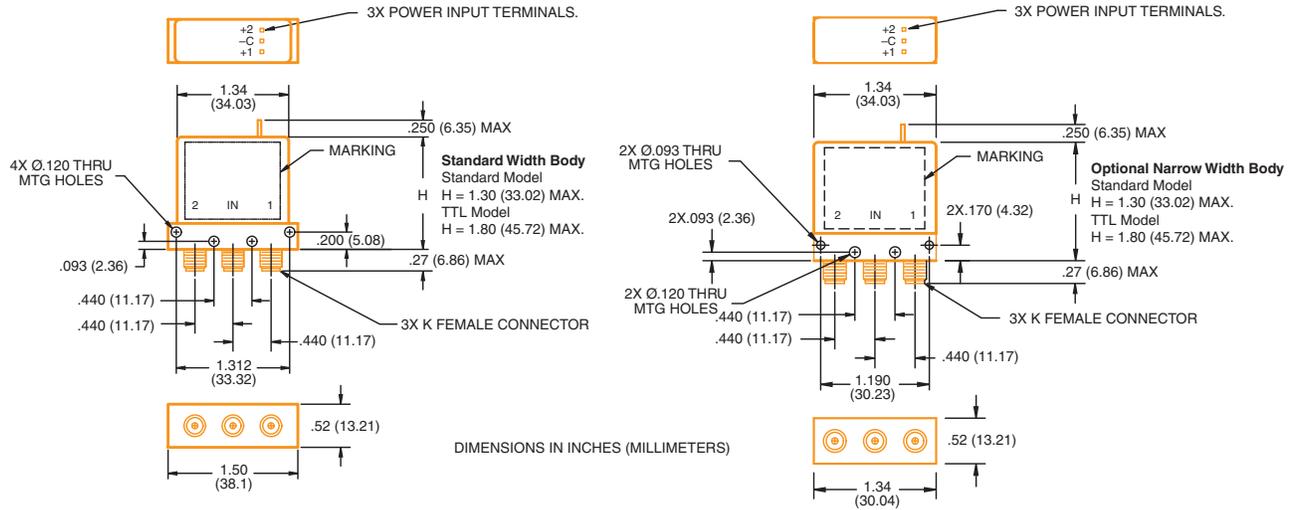
**TYPICAL PERFORMANCE CURVES**



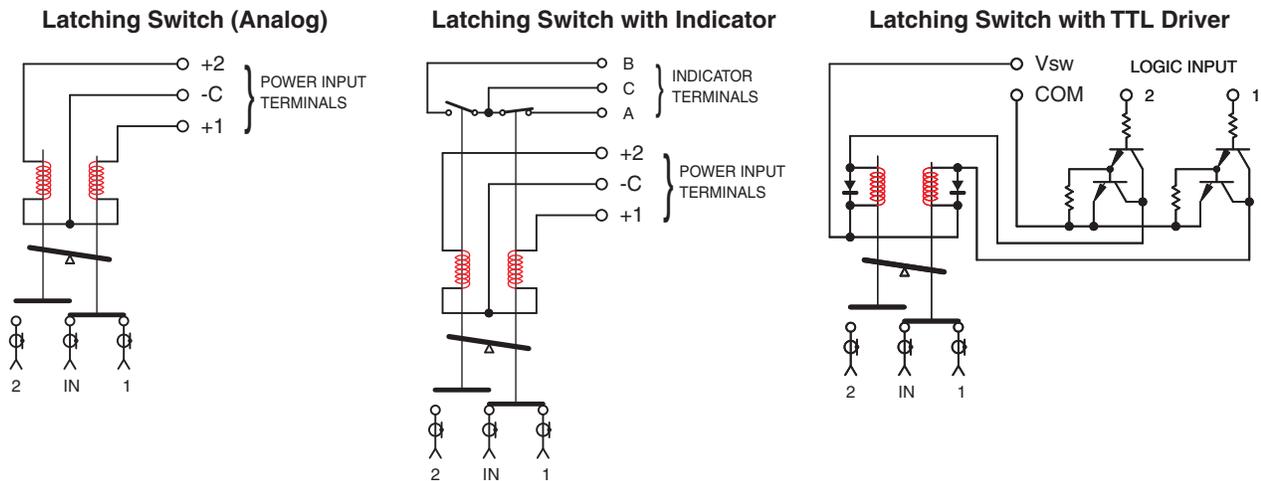
# Series CCR-33K

Miniature DC-33.5GHz  
Latching SPDT Coaxial Switch

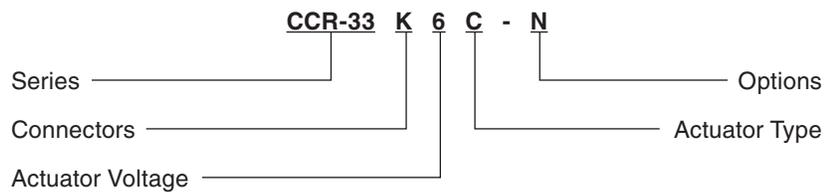
## MECHANICAL OUTLINE



## SCHEMATIC DIAGRAM



## PART NUMBERING SYSTEM



**Connector**  
K: K Female

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

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

**Options**  
T: TTL Drivers with Diodes  
N: Narrow Body  
R: Positive + Common  
M: Moisture Seal

For other options, contact factory.