



Excellence in Electronics

**TYPE
CK801**

The CK801 is a hermetically sealed point contact germanium diode designed for applications in computer circuitry where the reverse transient characteristic is of primary importance. The CK801 has very high back resistance, at least 1 megohm; small size, low shunt capacitance, and is resistant to changes in humidity and temperature.* Operable at temperatures up to 100°C, it can be heated as high as 125°C with no irreversible change in characteristics. Each diode is dynamically tested for hysteresis, drift, and flutter. The CK801 has extremely uniform electrical characteristic and reliable mechanical stability.

MECHANICAL DATA

TERMINALS: Dumet wire, Tinned to within 1/8" of barrel
Diameter: 0.017" max. Length: 1" min.

TERMINAL CONNECTIONS: White Band at Cathode Terminal

MOUNTING POSITION: Any

PLUG - IN EQUIVALENT: Available as CK801 - P

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES: (at 25°C)

Inverse Voltage	60 volts
Average Rectified Current	50 ma.
Peak Rectified Current	150 ma.
Surge Current (1 second)	500 ma.
Ambient Temperature Range	- 50 to + 100 °C
Dissipations at:	
25°C	80 mw.
50°C	65 mw.
75°C	50 mw.
100°C	30 mw.

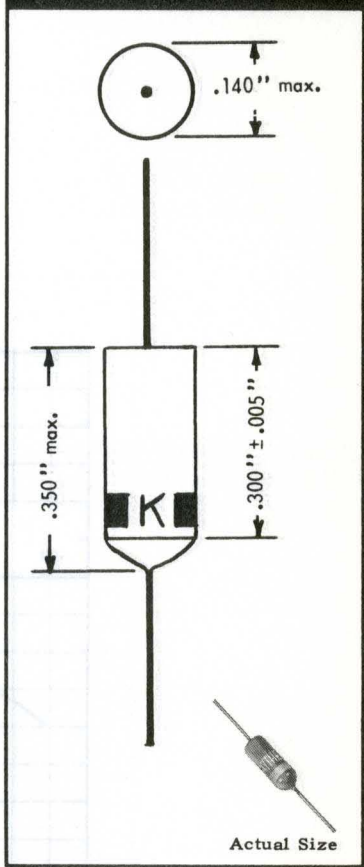
CHARACTERISTICS: (at 25°C)

Maximum Inverse Current at -50 volts	50 μa.
Minimum Forward Current at +1 volt	5.0 ma.
Shunt Capacitance	1.0 μfd.
Minimum Reverse Voltage for Zero Dynamic Resistance	75 volts

RECOVERY TIME CHARACTERISTICS:(at 25°C)

Reverse recovery time is measured as the time required for the diode to recover to a given reverse resistance when the operating voltage necessary to give 30mA forward conduction is switched to -35 volts with a rise time less than 0.1 μ sec. and a diode loop resistance of 2000 ohms. The CK801 recovers to the following resistances:
50,000 ohms (or 700 μA) in less than 0.5 μ sec.
400,000 ohms (or 87.5 μA) in less than 3.5 μ sec.

* Each diode receives repeated humidity cycling, and additional temperature cycling ranging from -25°C to 130°C.



Tentative Data

RAYTHEON MANUFACTURING COMPANY
RECEIVING AND CATHODE RAY TUBE OPERATIONS



GERMANIUM POINT CONTACT DIODE

TYPICAL STATIC CHARACTERISTICS (at 25°C)

