



*Excellence in Electronics*

# TYPE 1N294

(CK705A)

The 1N294 is a hermetically sealed point contact germanium diode designed for use in general purpose rectifier applications and gate leg or buffer circuits in computers. The 1N294 is particularly applicable where high back resistance, small size, absence of heater voltage, low shunt capacitance and resistance to changes in humidity and temperature\* are important. 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 1N294 has extremely uniform electrical characteristics 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 1N294-P

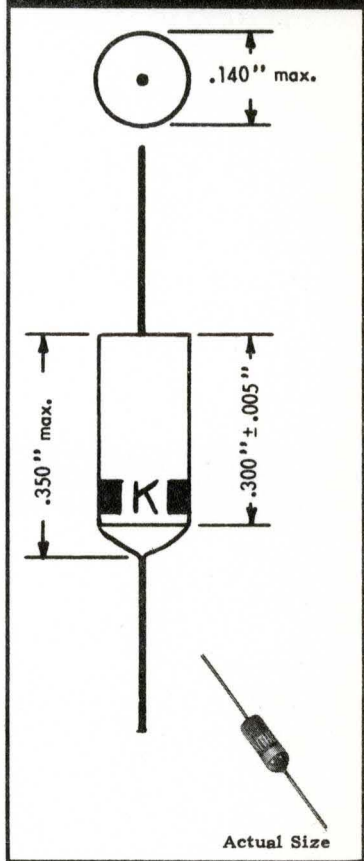
### ELECTRICAL DATA

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

Inverse Voltage	60 volts
Average Rectified Current	50 ma.
Peak Rectified Current	150 ma.
Surge Current (for 1 sec.)	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.

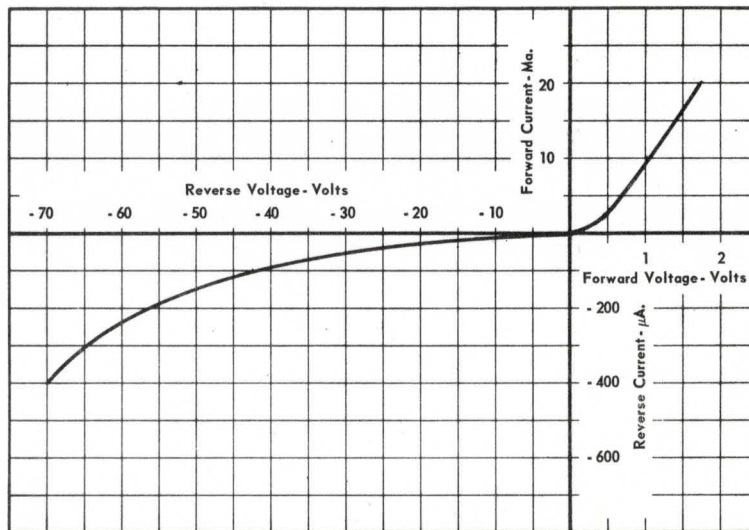
#### CHARACTERISTICS: (at 25°C)

Maximum Inverse Current at - 10 volts	10 μa.
Maximum Inverse Current at - 50 volts	800 μa.
Minimum Forward Current at + 1 volt	5.0 ma.
Shunt Capacitance	1.0 μμfd.
Minimum Reverse Voltage for Zero Dynamic Resistance	70 volts



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

TYPICAL STATIC CHARACTERISTICS (at 25°C)



Tentative Data

## RAYTHEON MANUFACTURING COMPANY

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