



Excellence in Electronics

TYPE 1N298

(CK713A)

The 1N298 is a hermetically sealed point contact germanium diode designed for use in general purpose rectifier applications, and in gate leg and buffer circuits in computers. The 1N298 is particularly applicable where the back resistance at -40 volts must be at least 160,000 ohms at 50°C. This diode has low shunt capacitance, small size, 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 1N298 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 1N298-P

ELECTRICAL DATA

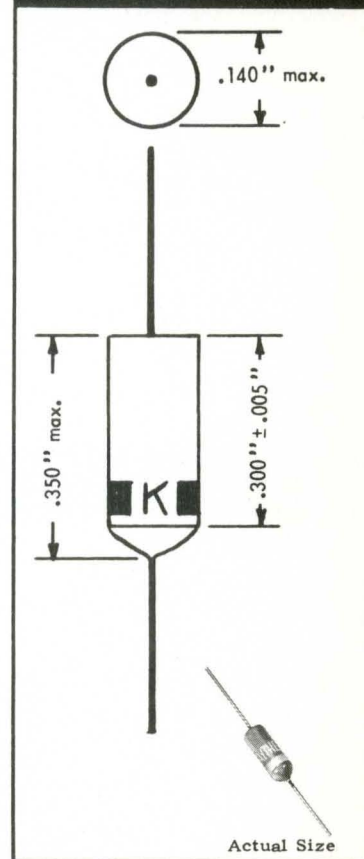
RATINGS - ABSOLUTE MAXIMUM VALUES: (at 25°C)

Inverse Voltage	70 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.

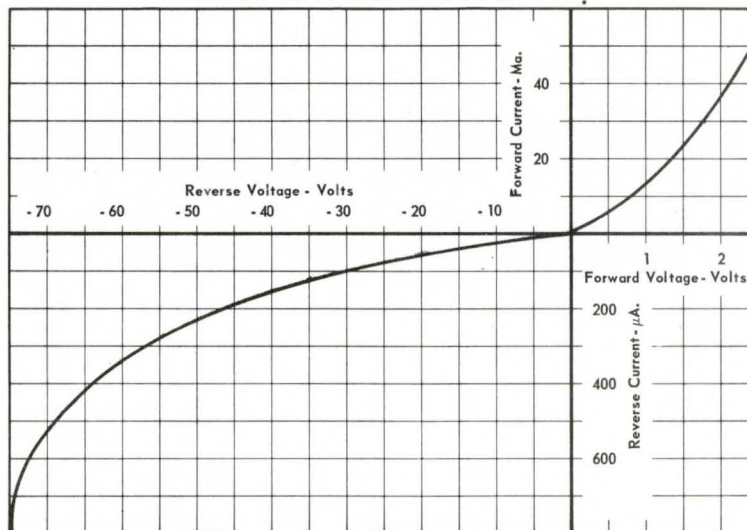
CHARACTERISTICS: (at 50°C)

Maximum Inverse Current at -40 volts	250 µa.
Minimum Forward Current at +2 volts	30 ma.
Shunt Capacitance	1.0 µmfd.
Minimum Reverse Voltage for Zero Dynamic Resistance	85 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