RAYTHEON

TECHNICAL INFORMATION

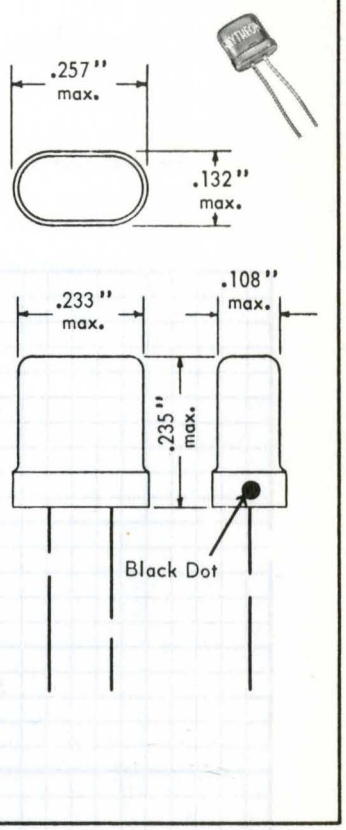
SILICON JUNCTION DIODE

Excellence in Electronics

TYPE 1N434

The 1N434 is a hermetically sealed silicon junction diode designed for general purpose applications and providing extreme stability, wide temperature range, high back resistance (100 megohms or more), and high ratio of back to forward resistance. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

Actual Size



MECHANICAL DATA

CASE: Metal and Glass

BASE: None (0.016" tinned dumet wire. Length: 1.0" min. Spacing: 0.080" center-to-center)

TERMINAL CONNECTIONS: *(Black Dot is adjacent to Cathode Terminal)*

MOUNTING POSITION: Any

ELECTRICAL DATA

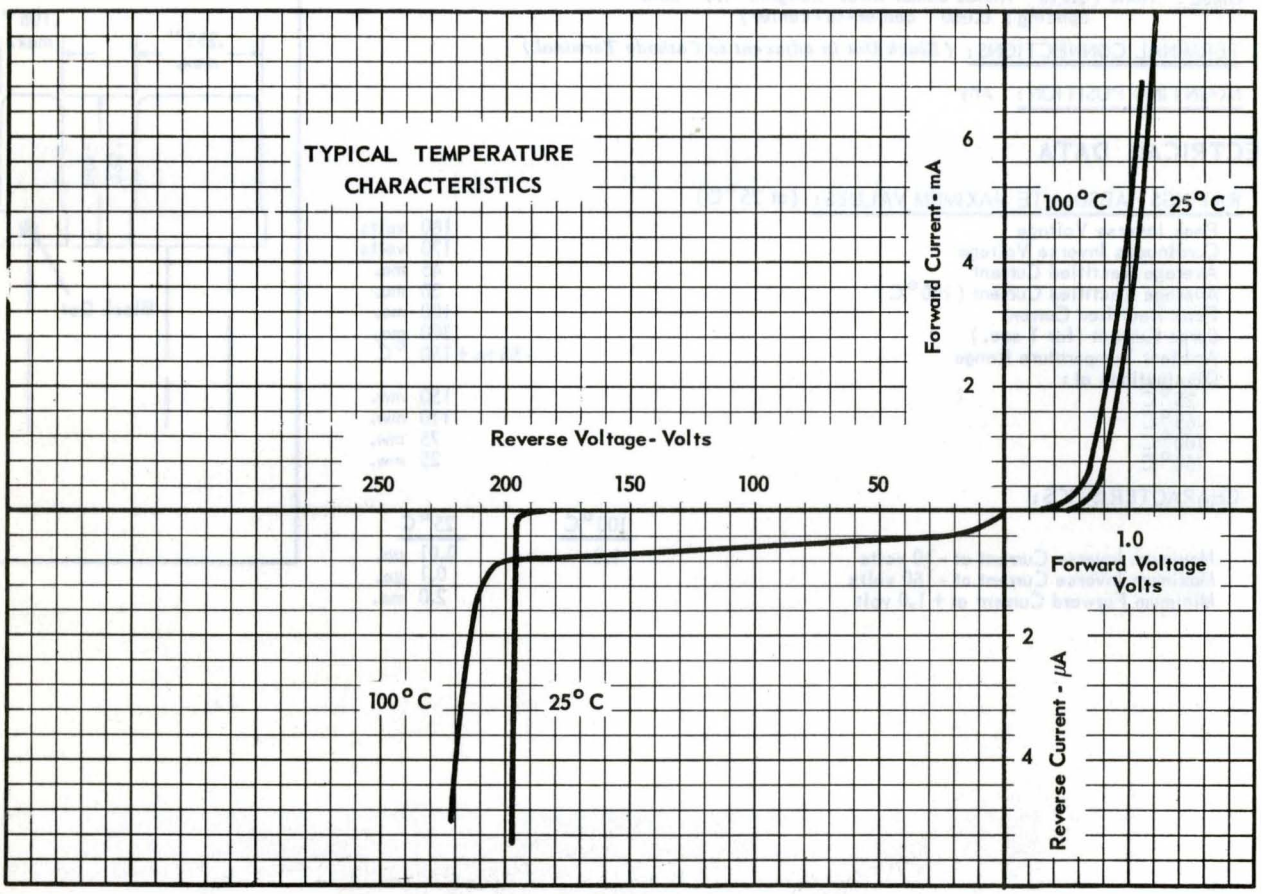
RATINGS - ABSOLUTE MAXIMUM VALUES: (at 25°C)

Peak Inverse Voltage	180 volts
Continuous Inverse Voltage	170 volts
Average Rectified Current	45 ma.
Average Rectified Current (100°C)	30 ma.
Peak Rectified Current	100 ma.
Surge Current (for 1 sec.)	300 ma.
Ambient Temperature Range	-55 to +150 °C
Dissipations at:	
25°C	150 mw.
65°C	110 mw.
100°C	75 mw.
150°C	25 mw.

CHARACTERISTICS:

	100°C	25°C
Maximum Inverse Current at -10 volts	1.0	0.01 μa.
Maximum Inverse Current at -160 volts		0.1 μa.
Minimum Forward Current at +1.0 volt		2.0 ma.

Tentative Data


TYPICAL TEMPERATURE CHARACTERISTICS
Forward Current - mA
6
4
2
100° C
25° C
Reverse Voltage - Volts
250
200
150
100
50
1.0
Forward Voltage Volts
2
4
Reverse Current - μA
100° C
25° C