

**RAYTHEON**

## TECHNICAL INFORMATION

SILICON  
JUNCTION DIODE*Excellence in Electronics*

The IN433 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.

## MECHANICAL DATA

CASE: Metal and GlassBASE: None (0.016" tinned domet wire. Length: 1.0" min.  
Spacing: 0.080" center-to-center)TERMINAL CONNECTIONS: (Black Dot is adjacent to Cathode Terminal)MOUNTING POSITION: Any

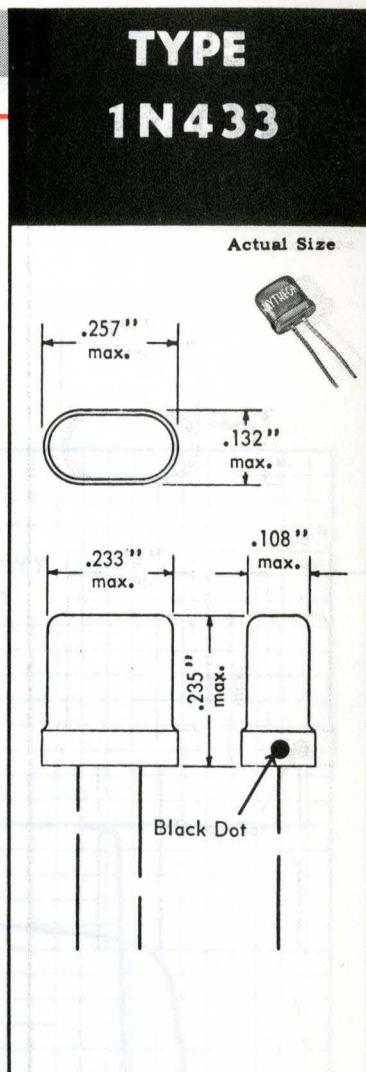
## ELECTRICAL DATA

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

Peak Inverse Voltage	145 volts
Continuous Inverse Voltage	135 volts
Average Rectified Current	50 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:

Maximum Inverse Current at -10 volts	100°C
Maximum Inverse Current at -125 volts	0.5
Minimum Forward Current at +1.0 volt	25°C



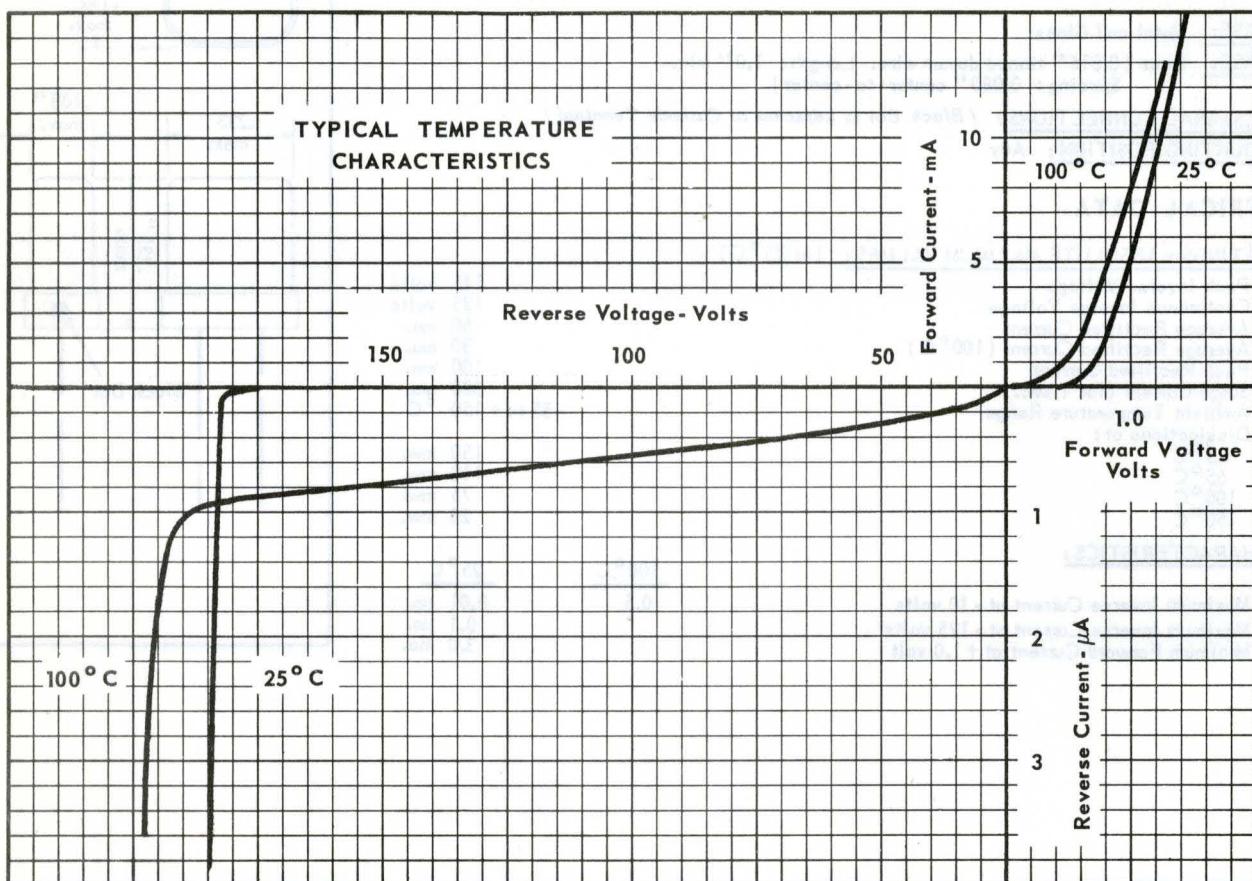
Tentative Data

**RAYTHEON MANUFACTURING COMPANY**

RECEIVING AND CATHODE RAY TUBE OPERATIONS

**SILICON JUNCTION DIODE**

This type exceeds 100% of the maximum reverse voltage rating of 150 Volts. The Raytheon 1N433 junction diode has high forward-current-handling ability, low reverse current, and low reverse voltage. It is suitable for use in rectifiers, detector circuits, and other applications where high current and low voltage are required at room temperature. It is also suitable for use in high-vacuum photomultiplier tubes to provide a low noise signal. The diode is designed to withstand high reverse voltage without damage or permanent change in characteristics.



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