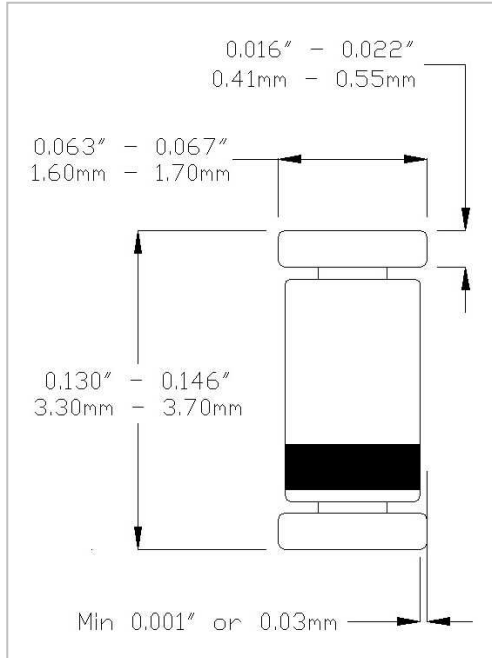


# 1N4454UR-1

## FEATURES

- 1N4454UR-1 AVAILABLE IN JAN, JANTX, AND JANTXV PER MIL-PRF-19500/144
- SWITCHING DIODE
- METALLURGICALLY BONDED
- HERMETICALLY SEALED
- DOUBLE PLUG CONSTRUCTION
- ALSO AVAILABLE AS LL4454, CDLL4454, & MLL4454



## MAXIMUM RATINGS AT 25 °C

|                              |                                        |
|------------------------------|----------------------------------------|
| Operating Temperature:       | -55°C to +175°C                        |
| Storage Temperature:         | -55°C to +175°C                        |
| Surge Current, Sine, 1uS:    | 4.0A                                   |
| Total Power Dissipation:     | 500mW                                  |
| Operating Current:           | 200mA, T <sub>A</sub> = +25°C          |
| Derating Factor:             | 1.33mA/°C above T <sub>A</sub> = +25°C |
| D.C. Reverse Voltage (VRWM): | 50V                                    |

## DC ELECTRICAL CHARACTERISTICS

| V <sub>F</sub> |                   |       |       | I <sub>R</sub> |        |        |        | V <sub>BR</sub> |                   |       |       |
|----------------|-------------------|-------|-------|----------------|--------|--------|--------|-----------------|-------------------|-------|-------|
| Ambient (°C)   | I <sub>F</sub> mA | Min V | Max V | Ambient (°C)   | V (dc) | Min μA | Max μA | Ambient (°C)    | I <sub>R</sub> μA | Min V | Max V |
| 25             | 10                | -     | 1.0   | 25             | 50     | -      | 0.1    | 25              | 5                 | 75    | -     |
| 150            | 10                | -     | 0.7   | 150            | 50     | -      | 100    | -55             | 10                | 75    | -     |

## DESIGN DATA

**Case:** Hermetically sealed glass package per MIL-PRF-19500/144 DO-213AA outline

**Lead Material:** Copper clad steel

**Lead Finish:** Tin/Lead

**Thermal Resistance (R<sub>θJC</sub>):** 100°C/W maximum

**Thermal Impedance (Z<sub>θJX</sub>):** 70°C/W maximum

**Polarity:** Cathode end is banded.

## AC ELECTRICAL CHARACTERISTICS AT 25°C

|                                                                                 | Symbol | Min | Max |
|---------------------------------------------------------------------------------|--------|-----|-----|
| Capacitance @ 0V                                                                | pF     | -   | 2.0 |
| T <sub>RR</sub> @ I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rec</sub> = 1mA. | nsec   | -   | 4.0 |
| T <sub>FR</sub> @ IF = 100mA                                                    | nsec   | -   | 30  |
| V <sub>FR</sub> @ IF = 100mA                                                    | V(pk)  | -   | 5   |



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