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SWITCHING DIODE

- METALLURGICALLY BONDED
- HERMETICALLY SEALED
- DOUBLE PLUG CONSTRUCTION

Qualified per MIL-PRF-19500/403

DEVICES
1N4500
QUALIFIED LEVELS
**JAN
 JANTX**
MAXIMUM RATING AT 25°C

| | |
|----------------------------|-----------------------------|
| Operating Temperature: | -65°C to +175°C |
| Storage Temperature: | -65°C to +200°C |
| Surge Current A, sine 1S: | 0.5A |
| Surge Current A, sine 1μS: | 4A |
| Leakage Current: 100nA | 75V, T _A = +25°C |

DC ELECTRICAL CHARACTERISTICS

| V _F | | | | I _R | | | | V _{BR} | | | |
|----------------|-------------------|-------|-------|----------------|----------------------|--------|--------|-----------------|-------------------|-------|-------|
| Ambient (°C) | I _F mA | Min V | Max V | Ambient (°C) | V _R V(dc) | Min μA | Max nA | Ambient (°C) | I _R μA | Min V | Max V |
| 25 | .250 | 0.47 | 0.56 | 25 | 75 | -- | 100 | 25 | 100 | 80 | -- |
| 25 | 1 | 0.52 | 0.60 | | | | | | | | |
| 25 | 10 | 0.64 | 0.72 | | | | | | | | |
| 25 | 20 | 0.67 | 0.77 | | | | | | | | |
| 25 | 300 | -- | 1.10 | | | | | | | | |

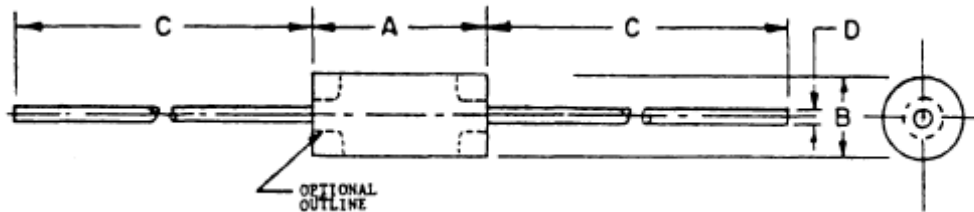
NOTE: (1) Derate 2.0mA/dc/°C for T_A > =25°C

AC ELECTRICAL CHARACTERISTICS AT 25°C

| | Min | Max | Unit |
|---|-----|-----|------|
| Capacitance @ 0V | -- | 4.0 | pF |
| I _F = I _R = 10mA R _L = 100 ohms | -- | 6.0 | ns |


DO-35

PACKAGE DIMENSIONS



NOTES:

1. Metric equivalents (to the nearest .01mm) are give for general information only and are based upon 1 inch = 25.4mm.
2. Both leads shall be within the specified limits (see 3.3.1).
3. The maximum diameter of dimension B shall apply for dimension A.
4. The minimum diameter for dimension B shall apply over at least .075 (1.91mm) of dimension A.
5. The specified lead diameter applies in the zone between .050 (1.27mm) and 1.00 (25.4mm) from the diode body to the end of the lead. Outside of this zone the lead diameter shall not exceed diameter B.

| Ltr | Dimensions | | | | Note |
|-----|------------|-------|-------------|-------|------|
| | Inches | | Millimeters | | |
| | Min | Max | Min | Max | |
| A | | .160 | | 4.06 | |
| B | | .075 | | 1.99 | 3, 4 |
| C | 1.000 | 1.500 | 25.40 | 38.10 | 2 |
| D | .018 | .022 | .46 | .56 | 5, 2 |

FIGURE 1: Physical dimensions diode: TYPE 1N4500

DESIGN DATA

Case: Hermetically sealed glass package per MIL-PRF-19500/403. DO-35 outline.

Lead Material: Copper clad steel

Lead Finish: Tin / Lead

Marking: 70°C/W maximum

Polarity: Cathode end is banded.