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# TECHNICAL DATA SHEET

## SWITCHING DIODE

- METALLURGICALLY BONDED
- HERMETICALLY SEALED
- DOUBLE PLUG CONSTRUCTION

Qualified per MIL-PRF-19500/241

## DEVICES

1N3595AUR-1

LL3595A

MLL3595A

## LEVELS

JAN  
JANTX  
JANTXV

## MAXIMUM RATING AT 25°C

|                              |                               |
|------------------------------|-------------------------------|
| Operating Temperature:       | -65°C to +175°C               |
| Storage Temperature:         | -65°C to +175°C               |
| Surge Current A, sine 1S:    | 500mA                         |
| Surge Current A, sine 1μS:   | 4A                            |
| Total Power Dissipation:     | 500mW                         |
| Operating Current:           | 150mA, T <sub>A</sub> = +25°C |
| D.C. Reverse Voltage (VRWM): | 125V                          |



## DC ELECTRICAL CHARACTERISTICS

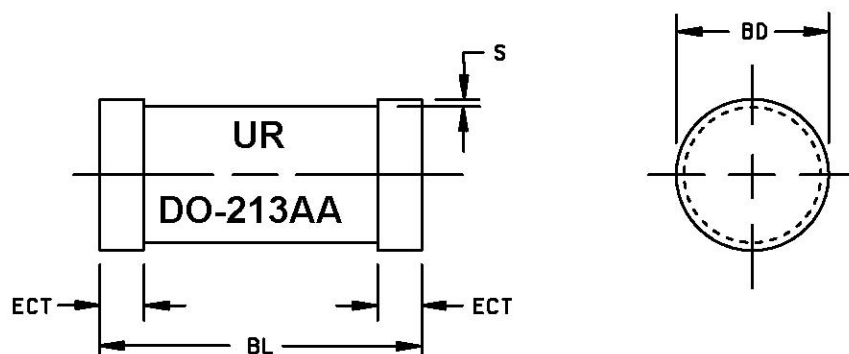
| V <sub>F</sub>  |                      |          |          | I <sub>R</sub>  |                          |           |           | V <sub>BR</sub> |                      |          |          |
|-----------------|----------------------|----------|----------|-----------------|--------------------------|-----------|-----------|-----------------|----------------------|----------|----------|
| Ambient<br>(°C) | I <sub>F</sub><br>mA | Min<br>V | Max<br>V | Ambient<br>(°C) | V <sub>R</sub><br>V (dc) | Min<br>μA | Max<br>μA | Ambient<br>(°C) | I <sub>R</sub><br>μA | Min<br>V | Max<br>V |
| 25              | 1                    | 0.52     | 0.70     | 25              | 125                      | -         | 0.002     | -55             | 100                  | 150      | -        |
| 25              | 5                    | 0.60     | 0.765    | 150             | 125                      | -         | 3         |                 |                      |          |          |
| 25              | 10                   | 0.65     | 0.80     |                 |                          |           |           |                 |                      |          |          |
| 25              | 50                   | 0.74     | 0.88     |                 |                          |           |           |                 |                      |          |          |
| 25              | 100                  | 0.79     | 0.92     |                 |                          |           |           |                 |                      |          |          |
| 25              | 200                  | 0.83     | 1.00     |                 |                          |           |           |                 |                      |          |          |

DO-213AA

## AC ELECTRICAL CHARACTERISTICS AT 25°C

|                                                                 | Min | Max | Unit |
|-----------------------------------------------------------------|-----|-----|------|
| Capacitance @ 0V                                                | -   | 8.0 | pF   |
| T <sub>RR</sub> @ I <sub>F</sub> = 10mA<br>V <sub>R</sub> = 35V | -   | 3.0 | μsec |

## PACKAGE DIMENSIONS



### NOTE:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Dimensions are pre-solder dip.
4. Referencing to dimension S, minimum clearance of glass body to mounting surface on all orientations.
5. In accordance with ASME Y14.5M, diameters are equivalent to  $\phi x$  symbology.

| Ltr | Dimensions |      |             |      | Notes |
|-----|------------|------|-------------|------|-------|
|     | Inches     |      | Millimeters |      |       |
|     | Min        | Max  | Min         | Max  |       |
| BD  | .063       | .067 | 1.60        | 1.70 |       |
| BL  | .130       | .146 | 3.30        | 3.70 |       |
| ECT | .016       | .022 | 0.41        | 0.55 |       |
| S   | .001 Min   |      | 0.03 Min    |      |       |

### DESIGN DATA

**Case:** Hermetically sealed glass package per MIL-PRF-19500/241 DO-213AA outline

**Lead Material:** Copper clad steel

**Lead Finish:** Tin / Lead

**Thermal Impedance ( $Z_{\theta JX}$ ):** 70°C/W maximum

**Polarity:** Cathode end is banded

**FIGURE 1. Physical dimensions - 1N3595UR-1, 1N3595AUR-1 (DO-213AA)**