

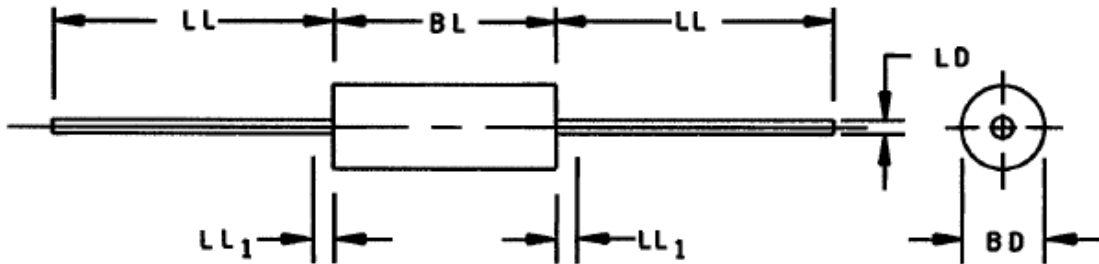
**TECHNICAL DATA**  
**DATASHEET 5095, Rev A.1****AVAILABLE AS****1N**  
**JAN, JANTX, JANTXV**  
**JANS**  
**JAN EQUIVALENT\***  
**SJ41XX\*, SX41XX\*, SV41XX\***  
**SS41XX\*****500mW Zener Voltage Regulator***Qualified per MIL-PRF-19500/435***FEATURES / BENEFITS:**

- ✓ Hermetic, non-cavity glass package
- ✓ Sharp zener knee
- ✓ Metallurgically bonded
- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ All parts are 100% hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/435

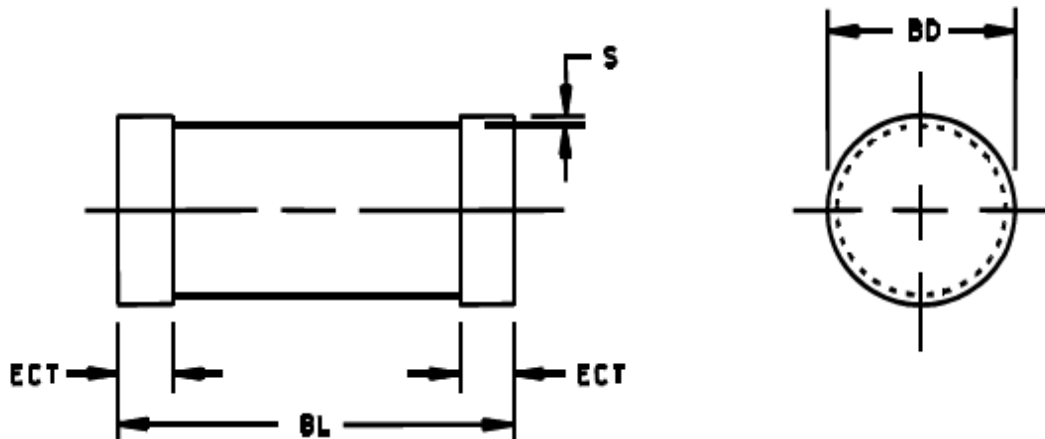
**ELECTRICAL CHARACTERISTICS:**

| Type<br>Number | Nominal<br>Zener Voltage         | Small-Signal<br>Reverse Breakdown<br>Impedance | Max Reverse<br>Leakage<br>Current | Surge Current    | Max Zener<br>Current |
|----------------|----------------------------------|------------------------------------------------|-----------------------------------|------------------|----------------------|
|                | V <sub>Z</sub> @ I <sub>ZT</sub> | I <sub>r</sub> @ 150C                          | I <sub>r</sub>                    | I <sub>ZSM</sub> | V <sub>r</sub>       |
|                | Volts                            | μA                                             | μA dc                             | mA               | Volts                |
| 1N4099-1/UR-1  | 6.8                              | 200                                            | 1.0                               | 650              | 5.2                  |
| 1N4100-1/UR -1 | 7.5                              | 200                                            | 1.0                               | 650              | 5.7                  |
| 1N4101-1/UR -1 | 8.2                              | 200                                            | 0.5                               | 650              | 6.3                  |
| 1N4102-1/UR -1 | 8.7                              | 200                                            | 0.5                               | 650              | 6.7                  |
| 1N4103-1/UR -1 | 9.1                              | 200                                            | 0.5                               | 650              | 7.0                  |
| 1N4104-1/UR -1 | 10                               | 200                                            | 0.5                               | 650              | 7.6                  |
| 1N4105-1/UR -1 | 11                               | 200                                            | 0.05                              | 590              | 8.5                  |
| 1N4106-1/UR -1 | 12.0                             | 200                                            | 0.05                              | 540              | 9.2                  |
| 1N4107-1/UR -1 | 13.0                             | 200                                            | 0.05                              | 500              | 9.9                  |
| 1N4108-1/UR -1 | 14.0                             | 200                                            | 0.05                              | 464              | 10.7                 |
| 1N4109-1/UR -1 | 15.0                             | 100                                            | 0.05                              | 433              | 11.4                 |
| 1N4110-1/UR -1 | 16.0                             | 100                                            | 0.05                              | 406              | 12.2                 |
| 1N4111-1/UR -1 | 17.0                             | 100                                            | 0.05                              | 382              | 13.0                 |
| 1N4112-1/UR -1 | 18.0                             | 100                                            | 0.05                              | 361              | 13.7                 |
| 1N4113-1/UR -1 | 19.0                             | 150                                            | 0.05                              | 342              | 14.5                 |
| 1N4114-1/UR -1 | 20.0                             | 150                                            | 0.01                              | 325              | 15.2                 |
| 1N4115-1/UR -1 | 22.0                             | 150                                            | 0.01                              | 295              | 16.8                 |
| 1N4116-1/UR -1 | 24.0                             | 150                                            | 0.01                              | 271              | 18.3                 |
| 1N4117-1/UR -1 | 25.0                             | 150                                            | 0.01                              | 260              | 19.0                 |
| 1N4118-1/UR -1 | 27.0                             | 150                                            | 0.01                              | 240              | 20.5                 |
| 1N4119-1/UR -1 | 28.0                             | 200                                            | 0.01                              | 232              | 21.3                 |
| 1N4120-1/UR -1 | 30.0                             | 200                                            | 0.01                              | 216              | 22.8                 |

\*Sensitron equivalent diodes are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our specification 7700-4093.

***SENSITRON***  
**SEMICONDUCTOR**TECHNICAL DATA  
DATASHEET 5095, Rev A.1**MECHANICAL DIMENSIONS in inches (mm):**

| Ltr             | Dimensions |       |             |       | Notes |
|-----------------|------------|-------|-------------|-------|-------|
|                 | Inches     |       | Millimeters |       |       |
|                 | Min        | Max   | Min         | Max   |       |
| BD              | .055       | .107  | 1.40        | 2.72  | 3     |
| BL              | .120       | .300  | 3.05        | 7.62  | 3     |
| LD              | .018       | .022  | 0.46        | 0.56  |       |
| LL              | 1.000      | 1.500 | 25.40       | 38.10 |       |
| LL <sub>1</sub> |            | .050  |             | 1.27  | 4     |



| Symbol | Dimensions |      |             |      |
|--------|------------|------|-------------|------|
|        | Inches     |      | Millimeters |      |
|        | Min        | Max  | Min         | Max  |
| BD     | .063       | .067 | 1.60        | 1.70 |
| ECT    | .016       | .022 | 0.41        | 0.56 |
| BL     | .130       | .146 | 3.30        | 3.71 |
| S      | .001 min   |      | 0.03 min    |      |

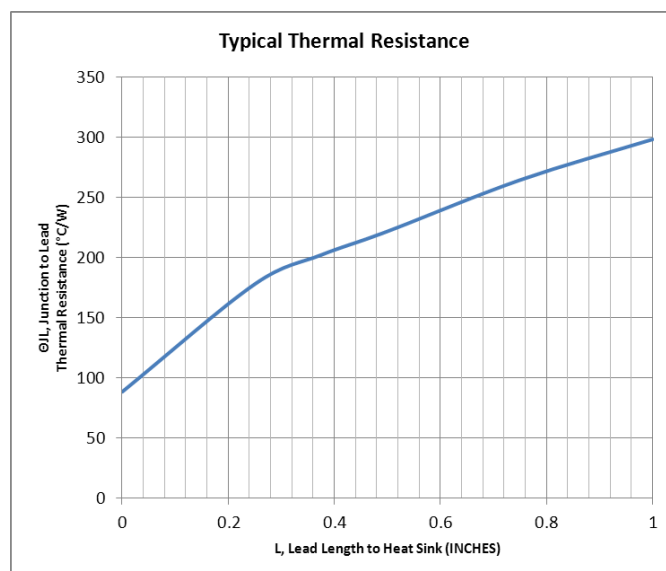
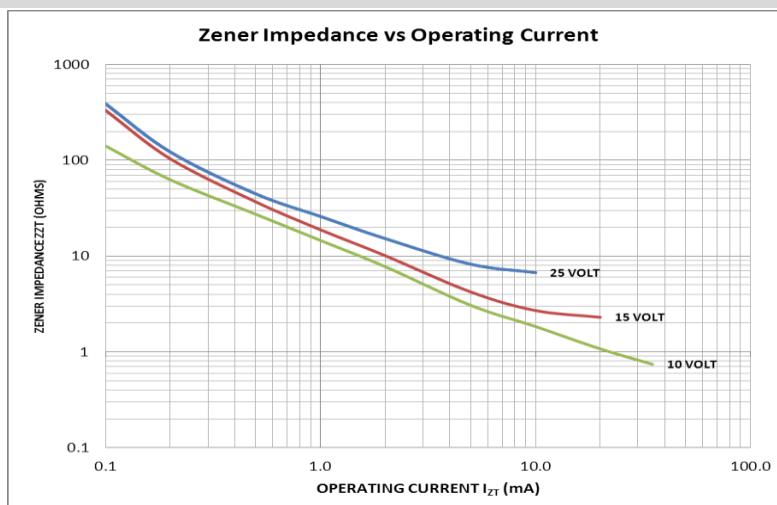
# SENSITRON SEMICONDUCTOR

TECHNICAL DATA  
DATASHEET 5095, Rev A.1

1N4099-1/UR-1 to 1N4120-1/UR-1

ZENER 500mW  
VOLTAGE REGULATOR

## GRAPHS:



## PART ORDERING INFORMATION

The following part numbers can be screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

| Sensitron Screening Level | *Part Number--<br>Leaded Package<br>(example for 1N4100-1) | Part Number- Surface Mount Package<br>(example for 1N4100-UR-1) |
|---------------------------|------------------------------------------------------------|-----------------------------------------------------------------|
| 1N                        | 1N4100-1                                                   | 1N4100UR-1                                                      |
| JAN                       | JAN1N4100-1                                                | JAN1N4100UR-1                                                   |
| SJ                        | SJ4100-1                                                   | SJ4100UR-1                                                      |
| JANTX                     | JANTX1N4100-1                                              | JANTX1N4100UR-1                                                 |
| SX                        | SX4100-1                                                   | SX4100UR-1                                                      |
| JANTXV                    | JANTXV1N4100-1                                             | JANTXV1N4100UR-1                                                |
| SV                        | SV4100-1                                                   | SV4100UR-1                                                      |
| JANS                      | JANS1N4100-1                                               | JANS1N4100UR-1                                                  |
| SS                        | SS4100-1                                                   | SS4100UR-1                                                      |

\*Parts can also be ordered Tape & Reel

**SENSITRON**  
**SEMICONDUCTOR****TECHNICAL DATA**  
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