

SENSITRON

SEMICONDUCTOR

1N6138A/US thru 1N6173A/US

TECHNICAL DATA DATA SHEET 5072, REV. –

| |
|----|
| SJ |
| SX |
| SV |

Transient Voltage Suppressor Diode, 1500W

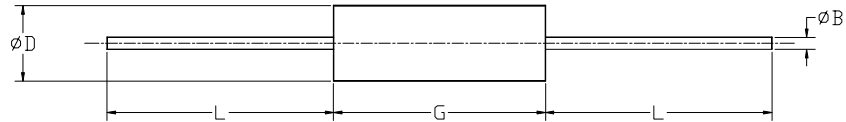
- Hermetic, non-cavity glass package
- Metallurgically bonded
- Operating and Storage Temperature: -55°C to +175°C

| SERIES TYPE | MIN BREAKDOWN VOLTAGE | | WORKING PEAK REVERSE VOLTAGE VRWM | MAXIMUM REVERSE CURRENT IR1 | MAX. CLAMP. VOLTAGE VC @ IP tp = 1ms | MAX. PEAK PULSE CURRENT IP | MAX. TEMP. COEFFICIENT V(BR) |
|-------------|-----------------------|-------|--------------------------------------|--------------------------------|---|-------------------------------|---------------------------------|
| | V(BR) @ I(BR) | | | | | | |
| 1500W | Vdc | mA dc | Vdc | µAdc | V(pk) | A(pk) | % / °C |
| 1N6138A/US | 6.12 | 175 | 5.2 | 500 | 10.5 | 142.8 | .05 |
| 1N6139A/US | 7.13 | 175 | 5.7 | 300 | 11.2 | 133.9 | .06 |
| 1N6140A/US | 7.79 | 150 | 6.2 | 100 | 12.1 | 124.0 | .06 |
| 1N6141A/US | 8.65 | 150 | 6.9 | 100 | 13.4 | 111.9 | .06 |
| 1N6142A/US | 9.50 | 125 | 7.6 | 100 | 14.5 | 103.4 | .07 |
| 1N6143A/US | 10.45 | 125 | 8.4 | 20 | 15.6 | 96.2 | .07 |
| 1N6144A/US | 11.40 | 100 | 9.1 | 20 | 16.9 | 88.8 | .07 |
| 1N6145A/US | 12.35 | 100 | 9.9 | 20 | 18.2 | 82.4 | .08 |
| 1N6146A/US | 14.25 | 75 | 11.4 | 20 | 21.0 | 71.4 | .08 |
| 1N6147A/US | 15.20 | 75 | 12.2 | 20 | 22.3 | 67.3 | .08 |
| 1N6148A/US | 17.10 | 65 | 13.7 | 10 | 25.1 | 59.8 | .085 |
| 1N6149A/US | 19.00 | 65 | 15.2 | 5.0 | 27.7 | 54.2 | .085 |
| 1N6150A/US | 20.9 | 50 | 16.7 | 5.0 | 30.5 | 49.2 | .085 |
| 1N6151A/US | 22.8 | 50 | 18.2 | 5.0 | 33.3 | 45.0 | .09 |
| 1N6152A/US | 25.7 | 50 | 20.6 | 5.0 | 37.4 | 40.1 | .09 |
| 1N6153A/US | 28.5 | 40 | 22.8 | 5.0 | 41.6 | 36.0 | .09 |
| 1N6154A/US | 31.4 | 40 | 25.1 | 5.0 | 45.7 | 32.8 | .095 |
| 1N6155A/US | 34.2 | 30 | 27.4 | 5.0 | 49.9 | 30.1 | .095 |
| 1N6156A/US | 37.1 | 30 | 29.7 | 5.0 | 53.6 | 28.0 | .095 |
| 1N6157A/US | 40.9 | 30 | 32.7 | 5.0 | 59.1 | 25.4 | .095 |
| 1N6158A/US | 44.7 | 25 | 35.8 | 5.0 | 64.6 | 23.2 | .095 |
| 1N6159A/US | 48.5 | 25 | 38.8 | 5.0 | 70.1 | 21.4 | .095 |
| 1N6160A/US | 53.2 | 20 | 42.6 | 5.0 | 77.0 | 19.5 | .095 |
| 1N6161A/US | 58.9 | 20 | 47.1 | 5.0 | 85.3 | 17.6 | .100 |
| 1N6162A/US | 64.6 | 20 | 51.7 | 5.0 | 97.1 | 15.4 | .100 |
| 1N6163A/US | 71.3 | 20 | 56.0 | 5.0 | 103.1 | 14.5 | .100 |
| 1N6164A/US | 77.9 | 15 | 62.2 | 5.0 | 112.8 | 13.3 | .100 |
| 1N6165A/US | 86.5 | 15 | 69.2 | 5.0 | 125.1 | 12.0 | .100 |
| 1N6166A/US | 95.0 | 12 | 76.0 | 5.0 | 137.6 | 10.9 | .100 |
| 1N6167A/US | 104.5 | 12 | 83.6 | 5.0 | 151.3 | 9.9 | .100 |
| 1N6168A/US | 114.0 | 10 | 91.2 | 5.0 | 165.1 | 9.1 | .100 |
| 1N6169A/US | 123.5 | 10 | 98.8 | 5.0 | 178.8 | 8.4 | .105 |
| 1N6170A/US | 142.5 | 8.0 | 114.0 | 5.0 | 206.3 | 7.3 | .105 |
| 1N6171A/US | 152 | 8.0 | 121.6 | 5.0 | 218.4 | 6.9 | .105 |
| 1N6172A/US | 171 | 5.0 | 136.8 | 5.0 | 245.7 | 6.1 | .110 |
| 1N6173A/US | 190 | 5.0 | 152.0 | 5.0 | 273.0 | 5.5 | .110 |

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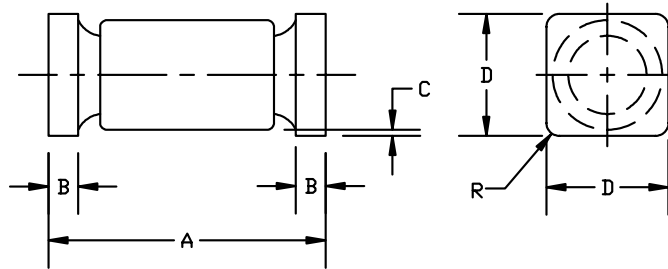
MECHANICAL DIMENSIONS In Inches / (mm)

AXIAL



| PACKAGE STYLE | DIMENSIONS - INCHES / MILLIMETERS | | | |
|---------------|-----------------------------------|-----------|-----------|------------|
| | ϕB | ϕD | G | L |
| AXIAL | .036/.042 | .135/.185 | .140/.195 | 1.00/1.30 |
| | .92/1.07 | 3.43/4.70 | 3.56/4.95 | 25.4/33.02 |

MELF



R = 0.020 Max

| STYLE | A | B | C | D |
|-------|-----------|-----------|---------|-----------|
| MELF | .205/.245 | .019/.028 | .003MIN | .183/.202 |
| | 5.21/6.22 | .48/.71 | .08MIN | 4.65/5.13 |

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