

SENSITRON

SEMICONDUCTOR

SS4954/US thru SS4996/US

TECHNICAL DATA DATA SHEET 5069, REV. A

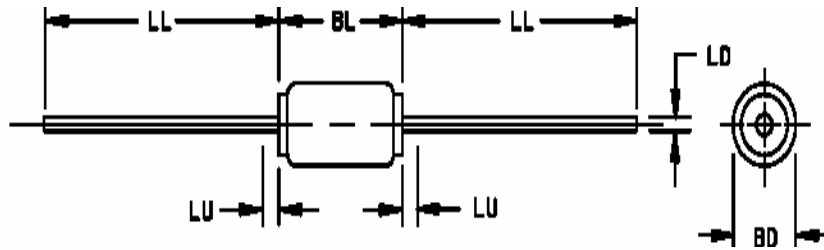
Zener 5W Voltage Regulator

- Hermetic, non-cavity glass package
- Metallurgically bonded
- Operating and Storage Temperature: -65°C to +175°C
- Manufactured and screened to MIL-PRF-19500/356 per Sensitron specification 7700-409x

| SERIES TYPE | V _Z NOM | TEST CURRENT I _Z | MAX ZENER IMPEDANCE | | VOLTAGE REGULATION V _Z | SURGE CURRENT I _{ZSM} | MAX REVERSE LEAKAGE CURRENT VOLTAGE | | TEMP. COEFF αV _Z | MAX CONTINUOUS CURRENT I _{ZM} |
|-------------|--------------------|-----------------------------|---------------------|-----------------|-----------------------------------|--------------------------------|-------------------------------------|-----------------|-----------------------------|--|
| | | | Z _Z | Z _{ZK} | | | V _R | I _{R1} | | |
| | V | mA | Ω | Ω | V | A | V | μA | %/°C | mA |
| 1N4954/US | 6.8 | 175 | 1 | 1,000 | .7 | 29.3 | 5.2 | 150 | .05 | 700 |
| 1N4955/US | 7.5 | 175 | 1.5 | 800 | .7 | 26.4 | 5.7 | 100 | .06 | 630 |
| 1N4956/US | 8.2 | 150 | 1.5 | 600 | .7 | 24 | 6.2 | 50 | .06 | 580 |
| 1N4957/US | 9.1 | 150 | 2 | 400 | .7 | 22 | 6.9 | 25 | .06 | 520 |
| 1N4958/US | 10 | 125 | 2 | 125 | .8 | 20 | 7.6 | 25 | .07 | 475 |
| 1N4959/US | 11 | 125 | 2.5 | 130 | .8 | 19 | 8.4 | 10 | .07 | 430 |
| 1N4960/US | 12 | 100 | 2.5 | 140 | .8 | 18 | 9.1 | 10 | .07 | 395 |
| 1N4961/US | 13 | 100 | 3 | 145 | .9 | 16 | 9.9 | 10 | .08 | 365 |
| 1N4962/US | 15 | 75 | 3.5 | 150 | 1.0 | 12 | 11.4 | 5 | .08 | 315 |
| 1N4963/US | 16 | 75 | 3.5 | 155 | 1.1 | 10 | 12.2 | 5 | .08 | 294 |
| 1N4964/US | 18 | 65 | 4 | 160 | 1.2 | 9.0 | 13.7 | 5 | .085 | 264 |
| 1N4965/US | 20 | 65 | 4.5 | 165 | 1.5 | 8.0 | 15.2 | 2 | .085 | 237 |
| 1N4966/US | 22 | 50 | 5 | 170 | 1.8 | 7.0 | 16.7 | 2 | .085 | 216 |
| 1N4967/US | 24 | 50 | 5 | 175 | 2.0 | 6.5 | 18.2 | 2 | .09 | 198 |
| 1N4968/US | 27 | 50 | 6 | 180 | 2.0 | 6.0 | 20.6 | 2 | .09 | 176 |
| 1N4969/US | 30 | 40 | 8 | 190 | 2.5 | 5.5 | 22.8 | 2 | .09 | 158 |
| 1N4970/US | 33 | 40 | 10 | 200 | 2.8 | 5.0 | 25.1 | 2 | .095 | 144 |
| 1N4971/US | 36 | 30 | 11 | 220 | 3.0 | 4.5 | 27.4 | 2 | .095 | 132 |
| 1N4972/US | 39 | 30 | 14 | 230 | 3.0 | 4.0 | 29.7 | 2 | .095 | 122 |
| 1N4973/US | 43 | 30 | 20 | 240 | 3.3 | 3.5 | 32.7 | 2 | .095 | 110 |
| 1N4974/US | 47 | 25 | 25 | 250 | 3.5 | 3.2 | 35.8 | 2 | .095 | 100 |
| 1N4975/US | 51 | 25 | 27 | 270 | 4.0 | 3.0 | 38.8 | 2 | .095 | 92 |
| 1N4976/US | 56 | 20 | 35 | 320 | 4.4 | 2.8 | 42.6 | 2 | .095 | 84 |
| 1N4977/US | 62 | 20 | 42 | 400 | 5.0 | 2.5 | 47.1 | 2 | .100 | 76 |
| 1N4978/US | 68 | 20 | 50 | 500 | 5.5 | 2.2 | 51.7 | 2 | .100 | 70 |
| 1N4979/US | 75 | 20 | 55 | 620 | 6.0 | 2.0 | 56 | 2 | .100 | 63 |
| 1N4980/US | 82 | 15 | 80 | 720 | 6.6 | 1.8 | 62.2 | 2 | .100 | 58.0 |
| 1N4981/US | 91 | 15 | 90 | 760 | 7.5 | 1.6 | 69.2 | 2 | .100 | 52.5 |
| 1N4982/US | 100 | 12 | 110 | 800 | 8.0 | 1.4 | 76.0 | 2 | .100 | 47.5 |
| 1N4983/US | 110 | 12 | 125 | 1,000 | 9.0 | 1.2 | 83.6 | 2 | .100 | 43.0 |
| 1N4984/US | 120 | 10 | 170 | 1,150 | 10 | 1.0 | 91.2 | 2 | .100 | 39.5 |
| 1N4985/US | 130 | 10 | 190 | 1,250 | 11 | .8 | 98.8 | 2 | .105 | 36.6 |
| 1N4986/US | 150 | 8 | 330 | 1,500 | 13 | .75 | 114.0 | 2 | .105 | 31.6 |
| 1N4987/US | 160 | 8 | 350 | 1,650 | 14 | .70 | 121.6 | 2 | .105 | 29.4 |
| 1N4988/US | 180 | 5 | 450 | 1,750 | 16 | .60 | 136.8 | 2 | .110 | 26.4 |
| 1N4989/US | 200 | 5 | 500 | 1,850 | 18 | .50 | 152.0 | 2 | .110 | 23.6 |
| 1N4990/US | 220 | 5 | 550 | 2,000 | 19 | .50 | 167 | 2 | .115 | 21.6 |
| 1N4991/US | 240 | 5 | 650 | 2,050 | 22 | .40 | 182 | 2 | .115 | 19.8 |
| 1N4992/US | 270 | 5 | 800 | 2,100 | 25 | .35 | 206 | 2 | .120 | 17.5 |
| 1N4993/US | 300 | 4 | 950 | 2,150 | 28 | .30 | 228 | 2 | .120 | 15.6 |
| 1N4994/US | 330 | 4 | 1175 | 2,200 | 32 | .25 | 251 | 2 | .120 | 14.4 |
| 1N4995/US | 360 | 3 | 1400 | 2,300 | 35 | .22 | 274 | 2 | .120 | 13 |
| 1N4996/US | 390 | 3 | 1800 | 2,500 | 40 | .20 | 297 | 2 | .120 | 12 |

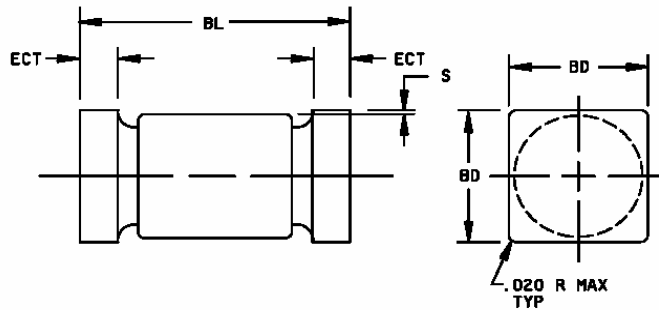
TECHNICAL DATA
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MECHANICAL DIMENSIONS
Zener 5W Package, AXIAL Version
In Inches / mm



| Dimensions | | | | | |
|------------|--------|-------|-------------|-------|-------|
| Ltr | Inches | | Millimeters | | Notes |
| | Min | Max | | | |
| BL | .130 | .300 | 3.30 | 4.95 | |
| BD | .090 | .145 | 2.92 | 4.70 | |
| LL | 1.00 | 1.300 | 25.40 | 33.02 | |
| LU | | .050 | | 1.27 | 4 |
| LD | .037 | .043 | 0.94 | 1.89 | 3 |

MECHANICAL DIMENSIONS
Zener 5W Package, MELF (/US version)
In Inches / mm



| Dimensions | | | | | |
|------------|--------|------|-------------|------|--|
| Ltr | Inches | | Millimeters | | |
| | Min | Max | Min | Max | |
| BL | .200 | .225 | 5.08 | 5.72 | |
| ECT | .019 | .028 | 0.48 | 0.71 | |
| S | .003 | --- | 0.08 | --- | |
| BD | .137 | .148 | 3.48 | 3.76 | |

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