

1N5333A - 1N5388A

SILICON ZENER DIODES

V_Z : 3.3 - 200 Volts

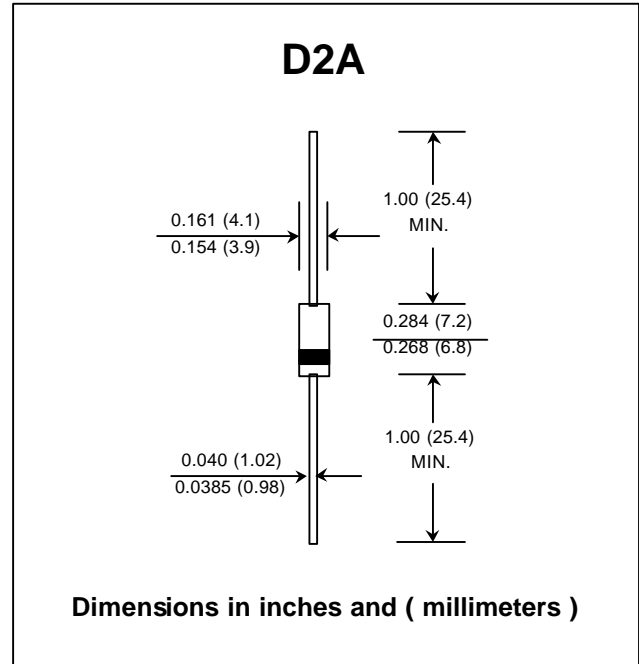
P_D : 5 Watts

FEATURES :

- * Complete Voltage Range 3.3 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current

MECHANICAL DATA

- * Case : D2A Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.645 gram



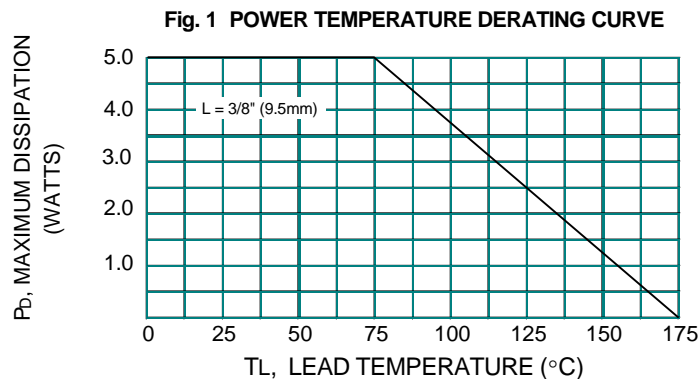
MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

| Rating | Symbol | Value | Unit |
|--|------------------|---------------|-------|
| DC Power Dissipation at T _L = 75 °C (Note1) | P _D | 5.0 | Watts |
| Maximum Forward Voltage at I _F = 200 mA | V _F | 1.2 | Volts |
| Maximum Thermal Resistance Junction to Ambient Air (Note2) | R _{θJA} | 45 | K / W |
| Junction Temperature Range | T _J | - 55 to + 175 | °C |
| Storage Temperature Range | T _s | - 55 to + 175 | °C |

Note :

- (1) T_L = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.





Certificate Number: Q10561

Certificate Number: E17276

ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

| TYPE | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current |
|---------|----------------------------------|-----------------|-----------------------------------|-----------------------------------|-----------------|---------------------------------|-----------------|--------------------------|
| | V _Z @ I _{ZT} | I _{ZT} | Z _{KT} @ I _{ZT} | Z _{KK} @ I _{ZK} | I _{ZK} | I _R @ V _R | I _{ZM} | |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μA) | (V) | (mA) |
| 1N5333A | 3.3 | 380 | 3.0 | 400 | 1.0 | 300 | 1.0 | 1440 |
| 1N5334A | 3.6 | 350 | 2.5 | 500 | 1.0 | 150 | 1.0 | 1320 |
| 1N5335A | 3.9 | 320 | 2.0 | 500 | 1.0 | 50 | 1.0 | 1220 |
| 1N5336A | 4.3 | 290 | 2.0 | 500 | 1.0 | 10 | 1.0 | 1100 |
| 1N5337A | 4.7 | 260 | 2.0 | 450 | 1.0 | 5.0 | 1.0 | 1010 |
| 1N5338A | 5.1 | 240 | 1.5 | 400 | 1.0 | 1.0 | 1.0 | 930 |
| 1N5339A | 5.6 | 220 | 1.0 | 400 | 1.0 | 1.0 | 2.0 | 856 |
| 1N5340A | 6.0 | 200 | 1.0 | 300 | 1.0 | 1.0 | 3.0 | 790 |
| 1N5341A | 6.2 | 200 | 1.0 | 200 | 1.0 | 150 | 4.0 | 765 |
| 1N5342A | 6.8 | 175 | 1.0 | 200 | 1.0 | 150 | 4.9 | 700 |
| 1N5343A | 7.5 | 175 | 1.5 | 200 | 1.0 | 150 | 5.4 | 630 |
| 1N5344A | 8.2 | 150 | 1.5 | 200 | 1.0 | 150 | 5.9 | 580 |
| 1N5345A | 8.7 | 150 | 2.0 | 200 | 1.0 | 150 | 6.3 | 545 |
| 1N5346A | 9.1 | 150 | 2.0 | 150 | 1.0 | 150 | 6.6 | 520 |
| 1N5347A | 10 | 125 | 2.0 | 125 | 1.0 | 150 | 7.2 | 475 |
| 1N5348A | 11 | 125 | 2.5 | 125 | 1.0 | 50 | 8.0 | 430 |
| 1N5349A | 12 | 100 | 2.5 | 125 | 1.0 | 2.0 | 8.6 | 395 |
| 1N5350A | 13 | 100 | 2.5 | 100 | 1.0 | 1.0 | 9.4 | 365 |
| 1N5351A | 14 | 100 | 2.5 | 75 | 1.0 | 1.0 | 10.1 | 340 |
| 1N5352A | 15 | 75 | 2.5 | 75 | 1.0 | 1.0 | 10.8 | 315 |
| 1N5353A | 16 | 75 | 2.5 | 75 | 1.0 | 1.0 | 11.5 | 295 |
| 1N5354A | 17 | 70 | 2.5 | 75 | 1.0 | 0.5 | 12.2 | 280 |
| 1N5355A | 18 | 65 | 2.5 | 75 | 1.0 | 0.5 | 13.0 | 265 |
| 1N5356A | 19 | 65 | 3.0 | 75 | 1.0 | 0.5 | 13.7 | 250 |
| 1N5357A | 20 | 65 | 3.0 | 75 | 1.0 | 0.5 | 14.4 | 237 |
| 1N5358A | 22 | 50 | 3.5 | 75 | 1.0 | 0.5 | 15.8 | 216 |
| 1N5359A | 24 | 50 | 3.5 | 100 | 1.0 | 0.5 | 17.3 | 198 |
| 1N5360A | 25 | 50 | 4.0 | 110 | 1.0 | 0.5 | 18.0 | 190 |
| 1N5361A | 27 | 50 | 5.0 | 120 | 1.0 | 0.5 | 19.4 | 176 |
| 1N5362A | 28 | 50 | 6.0 | 130 | 1.0 | 0.5 | 20.1 | 170 |
| 1N5363A | 30 | 40 | 8.0 | 140 | 1.0 | 0.5 | 21.6 | 158 |
| 1N5364A | 33 | 40 | 10 | 150 | 1.0 | 0.5 | 23.8 | 144 |
| 1N5365A | 36 | 30 | 11 | 160 | 1.0 | 0.5 | 25.9 | 132 |
| 1N5366A | 39 | 30 | 14 | 170 | 1.0 | 0.5 | 28.1 | 122 |
| 1N5367A | 43 | 30 | 20 | 190 | 1.0 | 0.5 | 31.0 | 110 |
| 1N5368A | 47 | 25 | 25 | 210 | 1.0 | 0.5 | 33.8 | 100 |
| 1N5369A | 51 | 25 | 27 | 230 | 1.0 | 0.5 | 36.7 | 93.0 |
| 1N5370A | 56 | 20 | 35 | 280 | 1.0 | 0.5 | 40.3 | 86.0 |
| 1N5371A | 60 | 20 | 40 | 350 | 1.0 | 0.5 | 43.0 | 79.0 |
| 1N5372A | 62 | 20 | 42 | 400 | 1.0 | 0.5 | 44.6 | 76.0 |
| 1N5373A | 68 | 20 | 44 | 500 | 1.0 | 0.5 | 49.0 | 70.0 |
| 1N5374A | 75 | 20 | 45 | 620 | 1.0 | 0.5 | 54.0 | 63.0 |
| 1N5375A | 82 | 15 | 65 | 720 | 1.0 | 0.5 | 59.0 | 58.0 |
| 1N5376A | 87 | 15 | 75 | 760 | 1.0 | 0.5 | 63.0 | 54.5 |
| 1N5377A | 91 | 15 | 75 | 760 | 1.0 | 0.5 | 65.5 | 52.5 |
| 1N5378A | 100 | 12 | 90 | 800 | 1.0 | 0.5 | 72.0 | 47.5 |
| 1N5379A | 110 | 12 | 125 | 1000 | 1.0 | 0.5 | 79.2 | 43.0 |
| 1N5380A | 120 | 10 | 170 | 1150 | 1.0 | 0.5 | 86.4 | 39.5 |
| 1N5381A | 130 | 10 | 190 | 1250 | 1.0 | 0.5 | 93.2 | 36.6 |
| 1N5382A | 140 | 8.0 | 230 | 1500 | 1.0 | 0.5 | 101 | 34.0 |
| 1N5383A | 150 | 8.0 | 330 | 1500 | 1.0 | 0.5 | 108 | 31.6 |
| 1N5384A | 160 | 8.0 | 350 | 1650 | 1.0 | 0.5 | 115 | 29.4 |
| 1N5385A | 170 | 8.0 | 380 | 1750 | 1.0 | 0.5 | 122 | 28.0 |
| 1N5386A | 180 | 5.0 | 430 | 1750 | 1.0 | 0.5 | 130 | 26.4 |
| 1N5387A | 190 | 5.0 | 450 | 1850 | 1.0 | 0.5 | 137 | 25.0 |
| 1N5388A | 200 | 5.0 | 480 | 1850 | 1.0 | 0.5 | 144 | 23.6 |

Note : (1) Suffix " A " indicates ± 10.0% tolerance, suffix "

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Datasheets for electronics components.