

ZENER SILICON RECTIFIER

VOLTAGE RANGE 90 to 330 Volts CURRENT 1.0 Ampere

FEATURES

- * High reliability
- * Low leakage
- * Low forward voltage drop
- * Excellent clamping capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| TYPE | Zener Breakdown Voltage | Dynamic Impedances @ 25°C TA | | | | Maximum Reverse Current @ Measurement Voltage and 25°C TA | | Maximum Forward Voltage @ 25°C TA @ IF = 1.0A |
|------|-------------------------|------------------------------|------|-----|------|---|-----|---|
| | | IzT | ZzT | IzK | ZzK | VR | IR | |
| | V | mA | Ohms | mA | Ohms | V | uA | V |
| Z90 | 90 | 2.7 | 250 | .25 | 2000 | 70 | 0.5 | 1.0 |
| Z100 | 100 | 2.5 | 350 | .25 | 3000 | 75 | 0.5 | 1.0 |
| Z105 | 105 | 2.4 | 400 | .25 | 3500 | 77 | 0.5 | 1.0 |
| Z110 | 110 | 2.3 | 450 | .25 | 4000 | 80 | 0.5 | 1.0 |
| Z115 | 115 | 2.2 | 500 | .25 | 4250 | 85 | 0.5 | 1.0 |
| Z120 | 120 | 2.1 | 550 | .25 | 4500 | 90 | 0.5 | 1.0 |
| Z130 | 130 | 1.9 | 700 | .25 | 5000 | 95 | 0.5 | 1.0 |
| Z135 | 135 | 1.85 | 750 | .25 | 5250 | 100 | 0.5 | 1.0 |

OPERATING AND STORAGE TEMPERATURE - 55°C to + 150°C

NOTE: Standard tolerance: +/-20%, Suffix "A" : +/-10%

| TYPE | Zener Breakdown Voltage | Dynamic Impedances @ 25°C TA | | | | Maximum Reverse Current @ Measurement Voltage and 25°C TA | | Maximum Forward Voltage @ 25°C TA @ IF = 1.0A |
|------|-------------------------|------------------------------------|------|-----|------|---|-----|---|
| | | VZ | IzT | ZzT | IzK | ZzK | VR | IR |
| | V | mA | Ohms | mA | Ohms | V | uA | V |
| Z140 | 140 | 1.8 | 800 | .25 | 5500 | 105 | 0.5 | 1.0 |
| Z150 | 150 | 1.7 | 1000 | .25 | 6000 | 110 | 0.5 | 1.0 |
| Z160 | 160 | 1.6 | 1100 | .25 | 6500 | 120 | 0.5 | 1.0 |
| Z170 | 170 | 1.5 | 1200 | .25 | 6750 | 130 | 0.5 | 1.0 |
| Z180 | 180 | 1.4 | 1350 | .25 | 7000 | 140 | 0.5 | 1.0 |
| Z190 | 190 | 1.3 | 1500 | .25 | 7500 | 150 | 0.5 | 1.0 |
| Z200 | 200 | 1.2 | 1700 | .25 | 8000 | 160 | 0.5 | 1.0 |
| Z220 | 220 | 1.1 | 2000 | .25 | 8250 | 170 | 0.5 | 1.0 |
| Z240 | 240 | 1.0 | 2200 | .25 | 8500 | 180 | 0.5 | 1.0 |
| Z270 | 270 | 0.9 | 2500 | .25 | 8750 | 200 | 0.5 | 1.0 |
| Z300 | 300 | 0.8 | 3000 | .25 | 9000 | 220 | 0.5 | 1.0 |
| Z330 | 330 | 0.75 | 4000 | .25 | 9500 | 240 | 0.5 | 1.0 |

OPERATING AND STORAGE TEMPERATURE - 55°C to + 150°C

NOTE: Standard tolerance: +/-20%, Suffix "A" : +/-10%

2002-12

RATING AND CHARACTERISTIC CURVES (Z90 THRU Z330)

