

**Standard Silicon Rectifiers**

**Reverse Voltage - 100 to 1000 V**

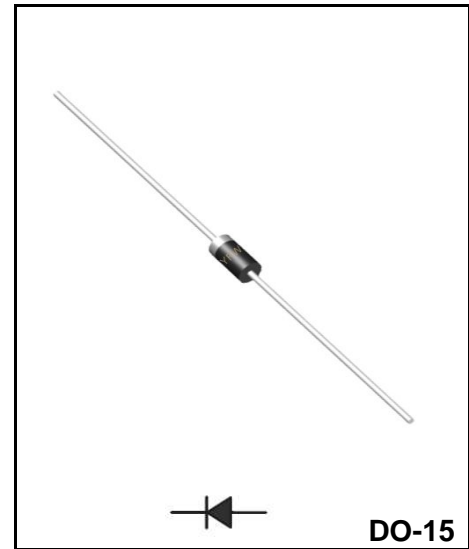
**Forward Current – 1.5 A**

**FEATURES**

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Open Junction chip
- ◆ High forward surge current capability
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆ Case: DO-15
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.33g / 0.0116oz



**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 current derate by 20 %.

| Parameter   | Symbols         | 1N5392     | 1N5393 | 1N5395 | 1N5397 | 1N5398 | 1N5399 | Units              |
|---|-----------------|------------|--------|--------|--------|--------|--------|--------------------|
| Maximum Repetitive Peak Reverse Voltage   | $V_{RRM}$       | 100        | 200    | 400    | 600    | 800    | 1000   | V                  |
| Maximum RMS voltage   | $V_{RMS}$       | 70         | 140    | 280    | 420    | 560    | 700    | V                  |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 100        | 200    | 400    | 600    | 800    | 1000   | V                  |
| Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$  | $I_{F(AV)}$     | 1.5        |        |        |        |        |        | A                  |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load  | $I_{FSM}$       | 50.0       |        |        |        |        |        | A                  |
| Maximum Instantaneous Forward Voltage at 1.5A   | $V_F$           | 1.35       |        |        |        |        |        | V                  |
| Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$<br>at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$ | $I_R$           | 5<br>500   |        |        |        |        |        | $\mu\text{A}$      |
| Typical Junction Capacitance <sup>(1)</sup>   | $C_j$           | 20.0       |        |        |        |        |        | pF                 |
| Typical Thermal Resistance <sup>(2)</sup>   | $R_{\theta JA}$ | 50.0       |        |        |        |        |        | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range   | $T_j, T_{stg}$  | -55 ~ +150 |        |        |        |        |        | $^\circ\text{C}$   |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

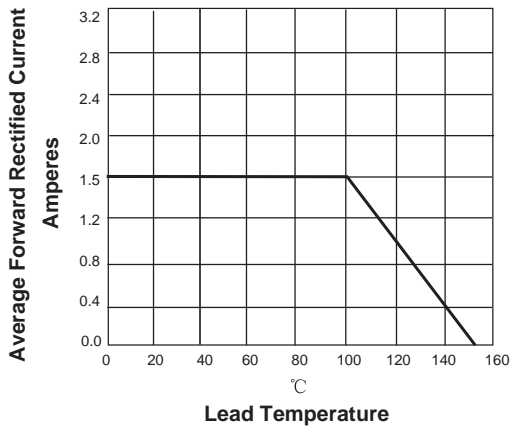


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

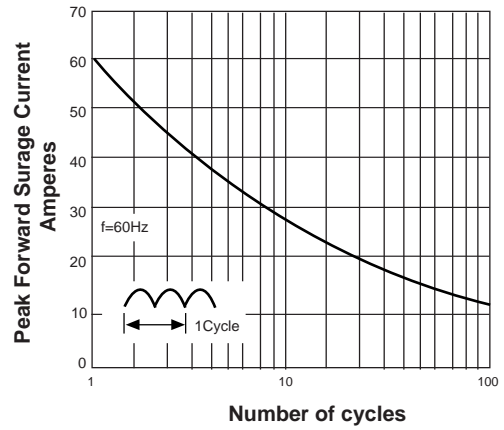


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

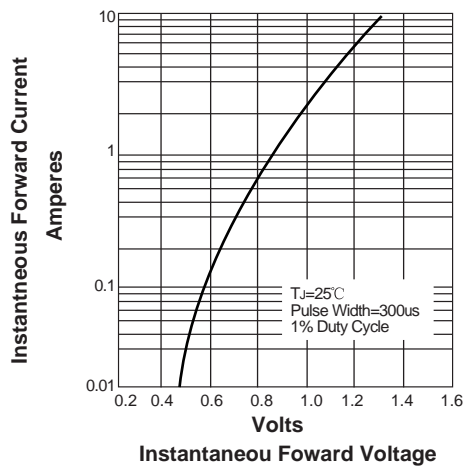
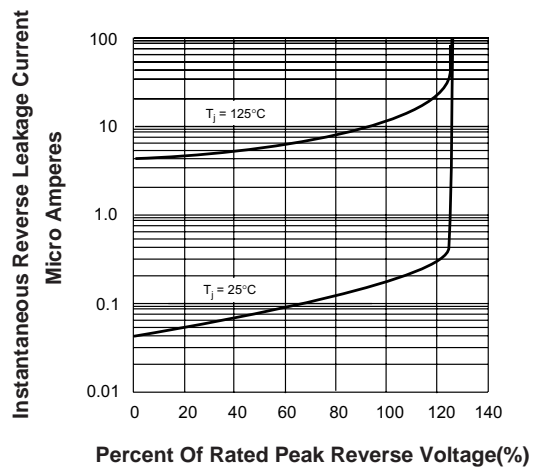


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



**Ordering information**

| Package | Packing Description | Packing Quantity                  |
|---------|---------------------|-----------------------------------|
| DO-15   | bulk                | 500PCS/Inner Box 30000PCS/Carton  |
|         | ammo pack           | 3000PCS/Inner Box 30000PCS/Carton |

**Package Dimensions**

**DO-15**

| Dim. | Millimeter(mm) |      | INCHES |       |
|------|----------------|------|--------|-------|
|      | Min.           | Max. | Min.   | Max.  |
| A    | 5.80           | 7.60 | 0.230  | 0.300 |
| B    | 2.60           | 3.60 | 0.104  | 0.140 |
| C    | 0.71           | 0.86 | 0.028  | 0.034 |
| D    | 25.4           | -    | 1.00   | -     |

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