

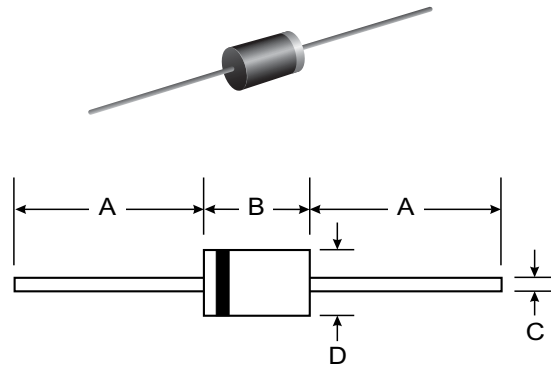
VOLTAGE RANGE: 50 - 800V
CURRENT: 3.0 A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

Mechanical Data

- Case : DO-201AD 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: 1.2 grams (approx.)



| DO-201AD | | |
|----------------------|-------|------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | 7.20 | 9.50 |
| C | 1.20 | 1.30 |
| D | 4.80 | 5.30 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | MR850 | MR851 | MR852 | MR854 | MR856 | MR858 | Unit |
|---|--------------------|---------------|-------|-------|-------|-------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Maximum Average Forward Current 0.375"(9.5mm) Lead Length T _a = 90 °C | I _{F(AV)} | 3.0 | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 100 | | | | | | A |
| Maximum Peak Forward Voltage at I _F = 3.0 A | V _F | 1.25 | | | | | | V |
| Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 100 °C | I _R | 10 | | | | | | μA |
| | I _{R(H)} | 150 | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 150 | | | | | | ns |
| Typical Junction Capacitance (Note 2) | C _J | 28 | | | | | | pf |
| Junction Temperature Range | T _J | - 65 to + 150 | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 150 | | | | | | °C |

Notes :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

RATING AND CHARACTERISTIC CURVES (MR850 - MR858)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

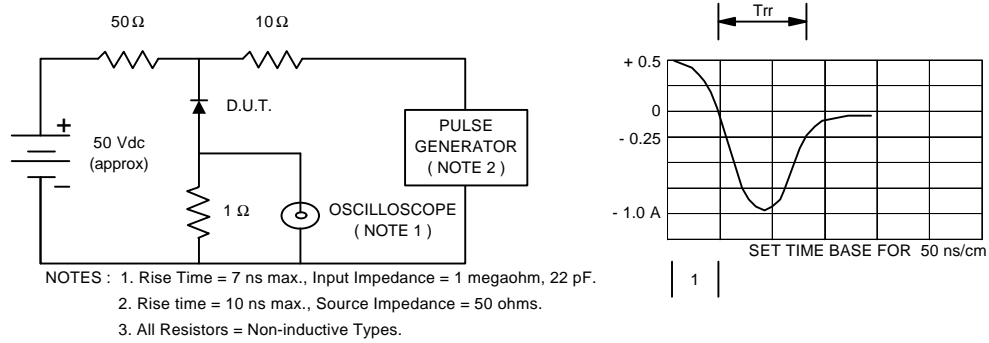


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

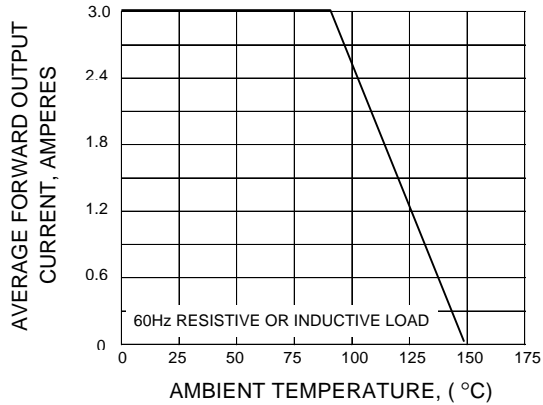


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

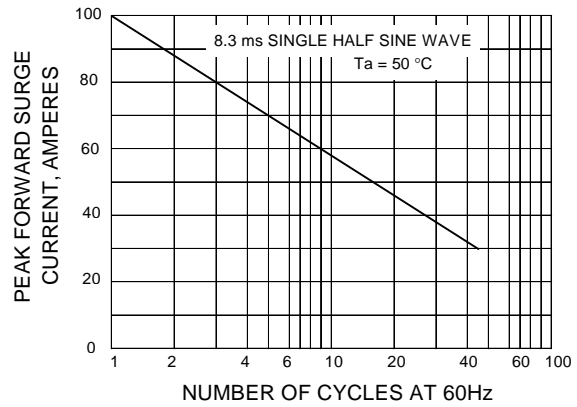


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

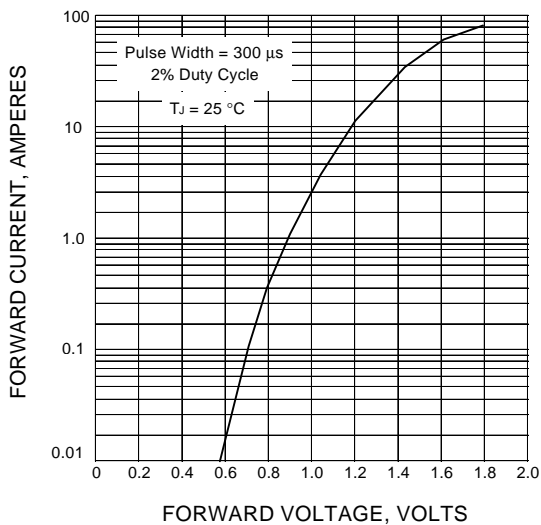


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

