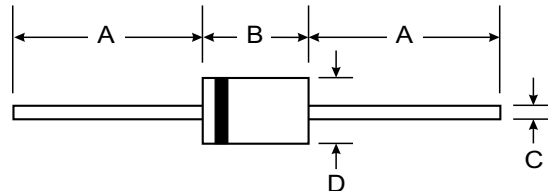


Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time



| 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 | | |

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 : 1.21 gram

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%.

| RATING | SYMBOL | SF31 | SF32 | SF33 | SF34 | SF35 | SF36 | SF37 | SF38 | SF39 | UNITS |
|---|--------------------|---------------|------|------|------|------|------|------|------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Current 0.375"(9.5mm) Lead Length T _a = 55 °C | I _{F(AV)} | 3.0 | | | | | | | | | Amps. |
| Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 125 | | | | | | | | | Amps. |
| Maximum Peak Forward Voltage at I _F = 3.0 A. | V _F | 0.95 | | | 1.4 | | 1.7 | | | Volts | |
| Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 100 °C | I _R | 5 | | | | | | | | | μA |
| | I _{R(H)} | 50 | | | | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 35 | | | | | | | | | ns |
| Typical Junction Capacitance (Note 2) | C _J | 50 | | | | | | | | | 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 Vdc



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

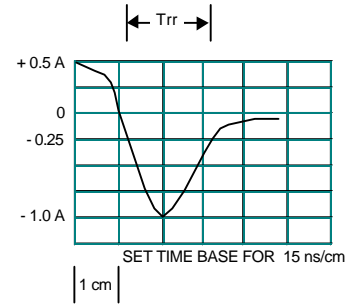
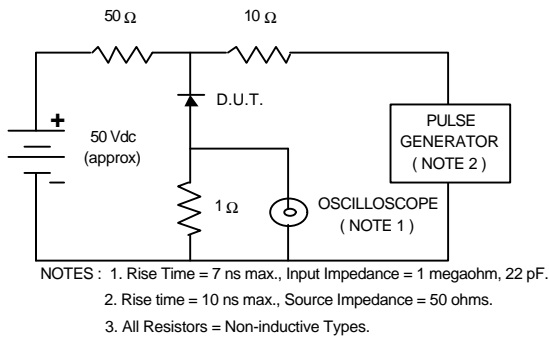


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

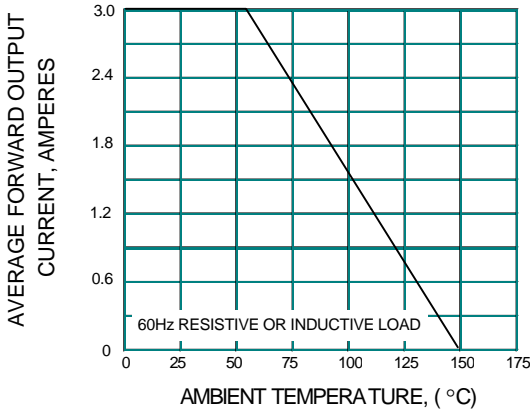


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

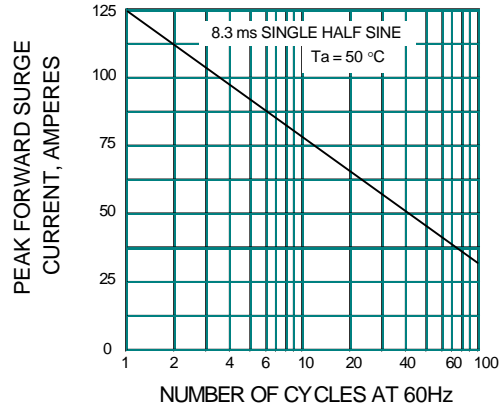


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

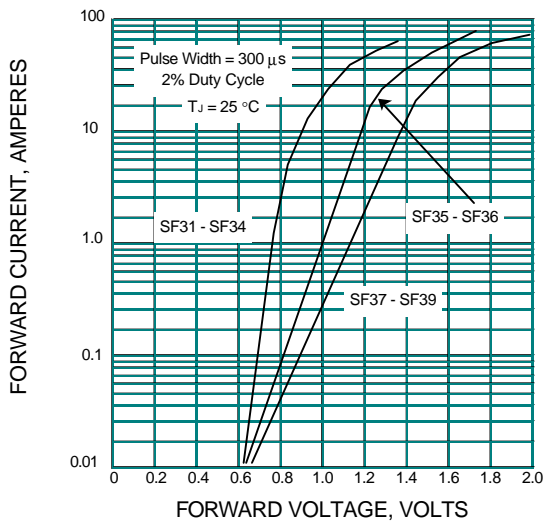


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

