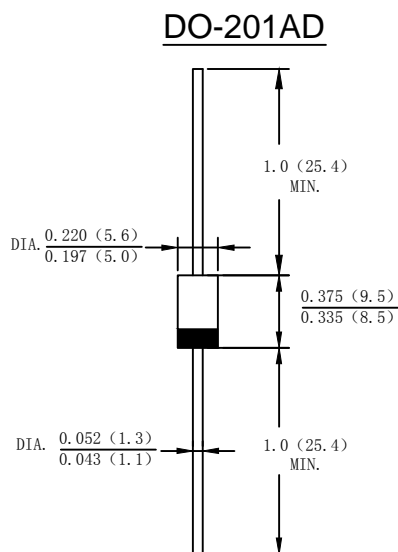


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- Guard ring for overvoltage protection
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- High surge capability

Mechanical Data

- Case: Moeded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For Rohs/Lead Free Version



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

| Type Number | SYMBOL | SB 320 | SB 330 | SB 340 | SB 350 | SB 360 | SB 380 | SB 3100 | SB 3150 | SB 3200 | SB 3250 | Unit |
|--|-----------------|--------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | 175 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V |
| Average Rectified Output Current (Note 1) @ $T_A=75^\circ C$ | I_O | 3.0 | | | | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 80 | | | | | | | | | | A |
| Forward Voltage @ $I_F=3.0A$ | V_{FM} | 0.55 | | 0.70 | | 0.85 | | 0.92 | | 0.95 | | V |
| Peak Reverse Current @ $T_A=25^\circ C$ | I_R | 0.1 | | | | | 0.05 | | | | | mA |
| At Rated DC Blocking Voltage @ $T_A=100^\circ C$ | | 10.0 | | | | | 5.0 | | | | | |
| Typical Junction Capacitance (Note 2) | C_J | 250 | | | | 160 | | | | | | pF |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R_{\theta JA}$ | 40 | | | | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to + 150 | | | | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to + 150 | | | | | | | | | | $^\circ C$ |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

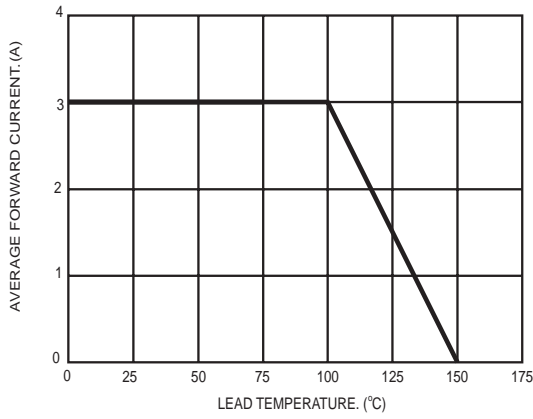


FIG.2- TYPICAL FORWARD CHARACTERISTICS

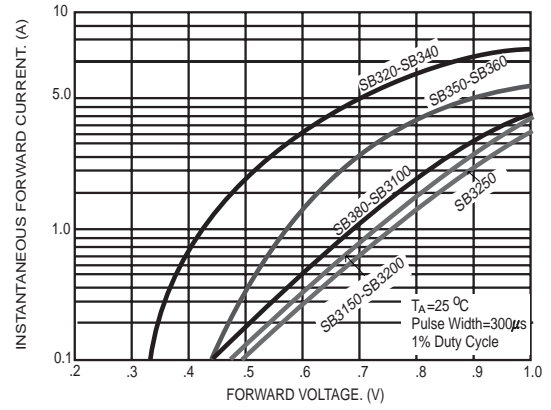


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

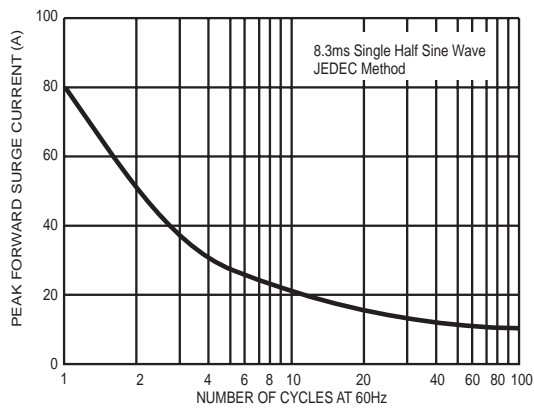


FIG.4- TYPICAL JUNCTION CAPACITANCE

