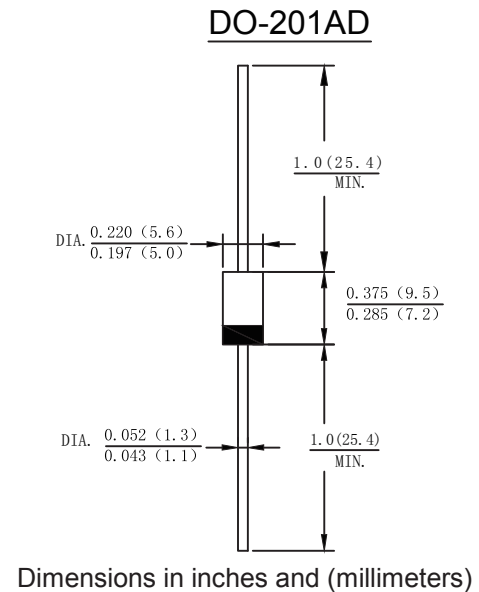


Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

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



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	ER808	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	V
Maximum RMS Voltage	V_{RMS}	560	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 55^\circ\text{C}$	$I_{(AV)}$	8.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @ 6.0A	V_F	2.0	V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 100	uA uA
Maximum Reverse Recovery Time	T_{rr}	35	nS
Typical Junction Capacitance	C_j	58	pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	47 5.0	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

Notes: 1. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
 3. Mount on Cu-Pad Size 16mm x 16mm on PCB.



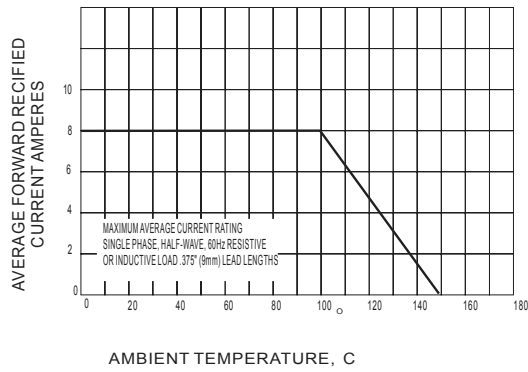


FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT RATING

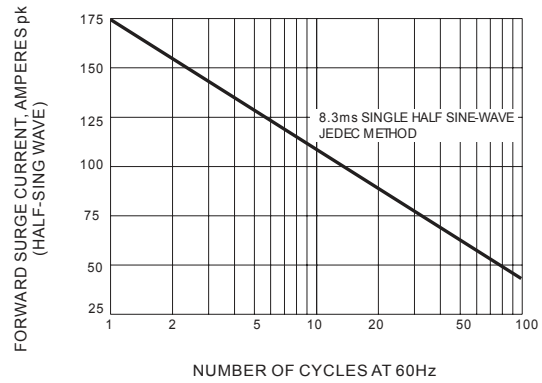


FIG. 2 MAXIMUM NON-REPEITIVE SURGE CURRENT

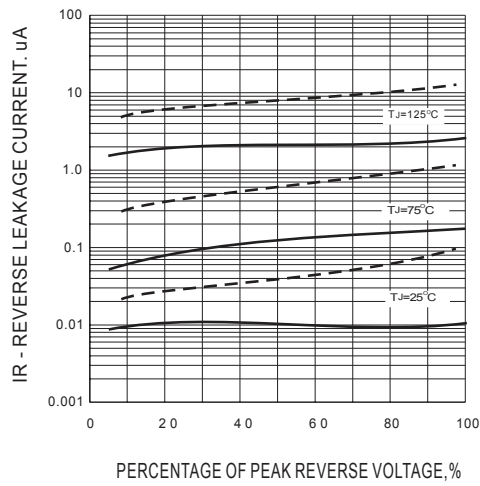


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

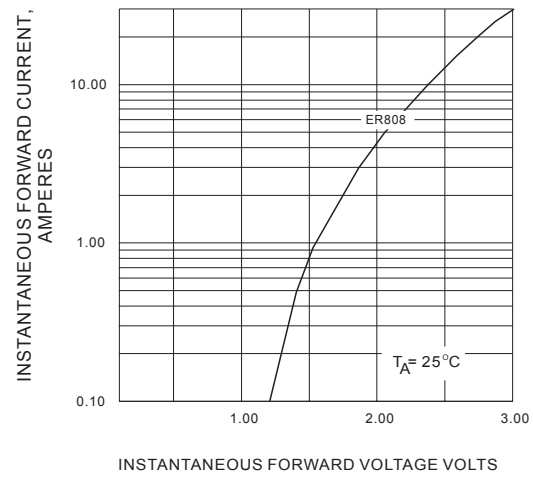


FIG. 4 TYPICAL JUNCTION CAPACITANCE

