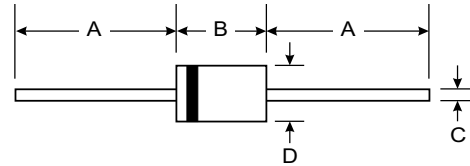


Features

- Glass Passivated Die Construction
- Super-Fast Recovery Time For High Efficiency
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 70A Peak
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Marking: R460
- Polarity: Cathode Band
- Weight: 1.12 grams (approx.)
- Mounting Position: Any

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

@ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR460	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	424	V
Average Rectified Output Current @ $T_T = 40^\circ\text{C}$	I_O	4.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	70	A
Forward Voltage @ $I_F = 3.0\text{A}$, $T_J = 150^\circ\text{C}$ @ $I_F = 3.0\text{A}$, $T_J = 25^\circ\text{C}$ @ $I_F = 4.0\text{A}$, $T_J = 25^\circ\text{C}$	V_{FM}	1.05 1.25 1.28	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 150^\circ\text{C}$	I_{RM}	10 250	μA
Reverse Recovery Time (Note 2)	t_{rr}	50	ns
Forward Recovery Time (Note 3)	t_{fr}	50	ns
Typical Junction Capacitance (Note 1)	C_j	75	pF
Typical Thermal Resistance, Junction to Ambient (Note 4)	$R_{\theta JA}$	52	K/W
Operating and Storage Temperature Range	T_J , T_{STG}	-65 to +175	$^\circ\text{C}$

- Notes:
1. Measured at 1.0MHz and applied reverse voltage of 4V DC.
 2. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$. See Figure 5.
 3. Measured with $I_F = 1.0\text{A}$, $di/dt = 100\text{A}/\mu\text{s}$, Duty Cycle $\leq 2.0\%$.
 4. Mounted to PCB, lead length = 9.5mm.

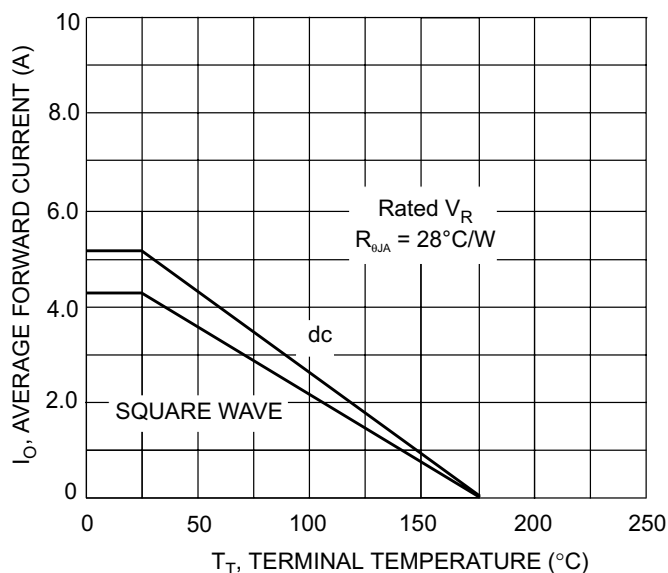


Fig. 1 Forward Current Derating Curve

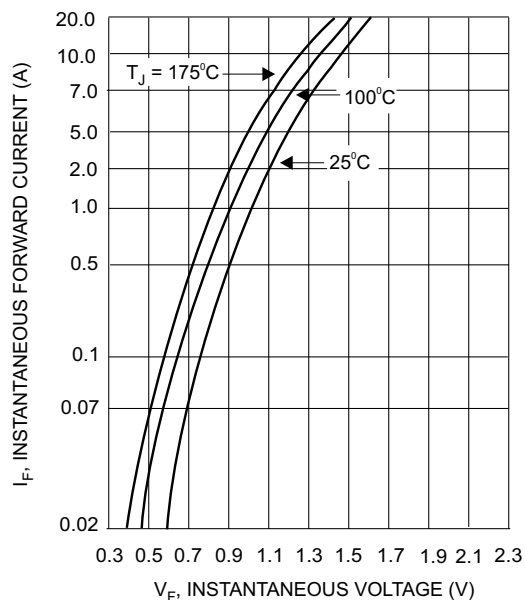


Fig. 2 Typical Forward Characteristics

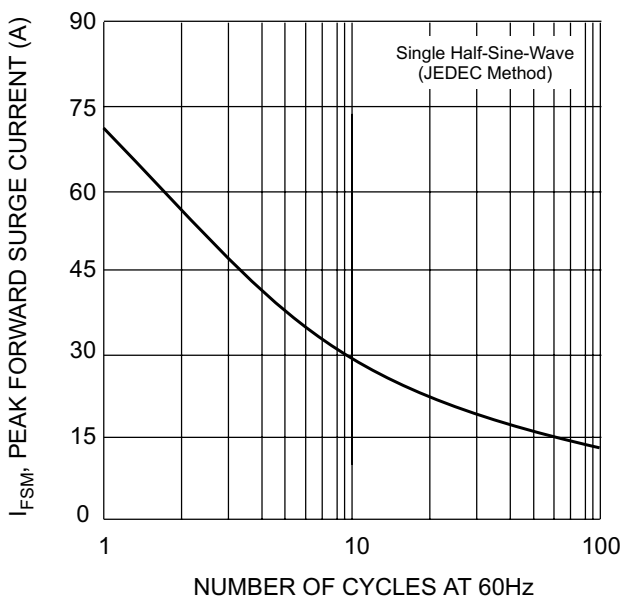


Fig. 3 Surge Current Derating Curve

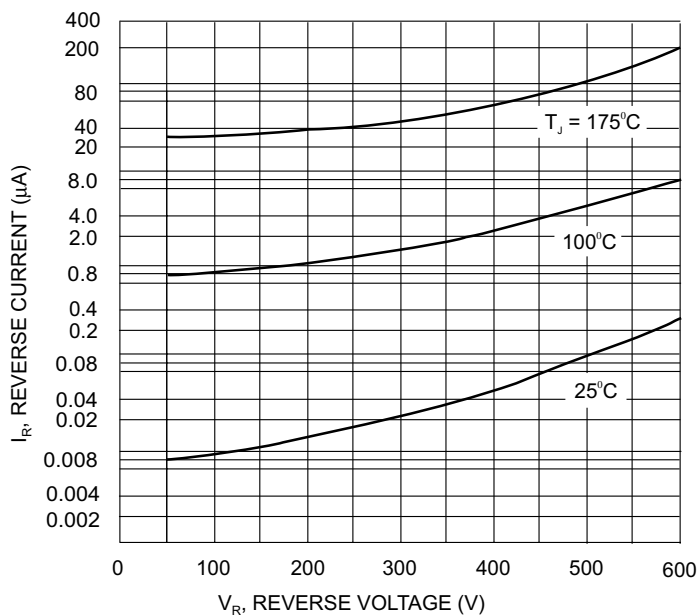
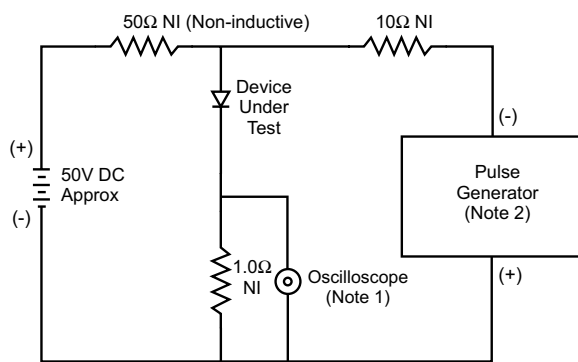


Fig. 4 Typical Reverse Characteristics



- Notes:
 1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

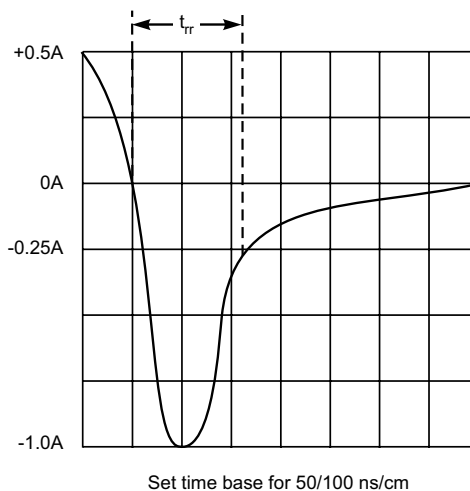


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit