

MUR460A-E

GLASS PASSIVATED JUNCTION Ultrafast Plastic Rectifiers

VOLTAGE: 600V

CURRENT: 4.0A

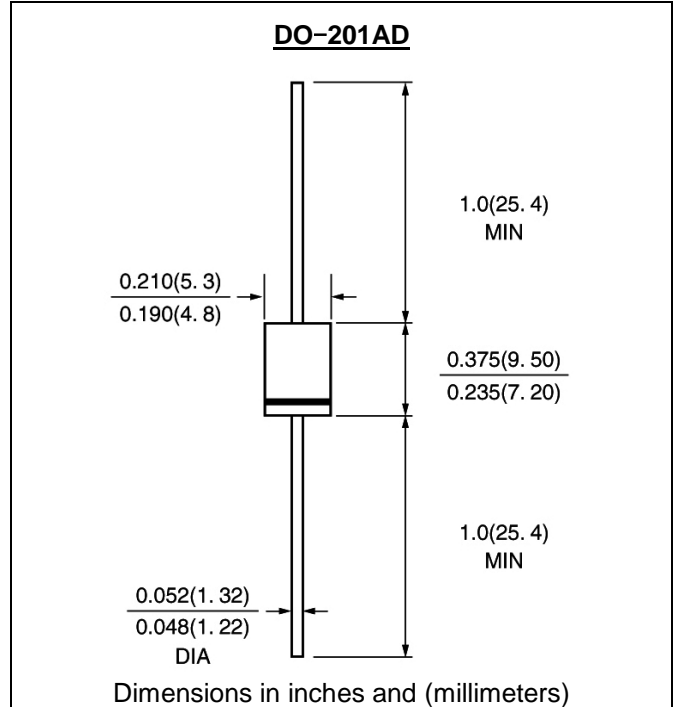


FEATURE

Plastic package has Underwriters Laboratories flammability Classification 94V-0
Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
Ultra fast recovery time for high efficiency
Excellent high temperature switching
Glass passivated junction
High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
Halogen Free

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body over passivated chip
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.045 oz., 1.2 g



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	MUR460A-E	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified	I _{f(av)}	4.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	175	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	1.28	V
Maximum Reverse Recovery Time (Note 1)	T _{rr}	45	nS
Maximum DC Reverse Current at rated DC blocking voltage	I _r	10 100	μA
Typical thermal resistance junction to ambient (Note 2)	R _{th(ja)}	26	°C/W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +175	°C

Note:

- Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
- Lead length = 1/2" on P.C. board with 1.5" x 1.5" copper surface

Fig. 1 – Forward Current Derating Curve

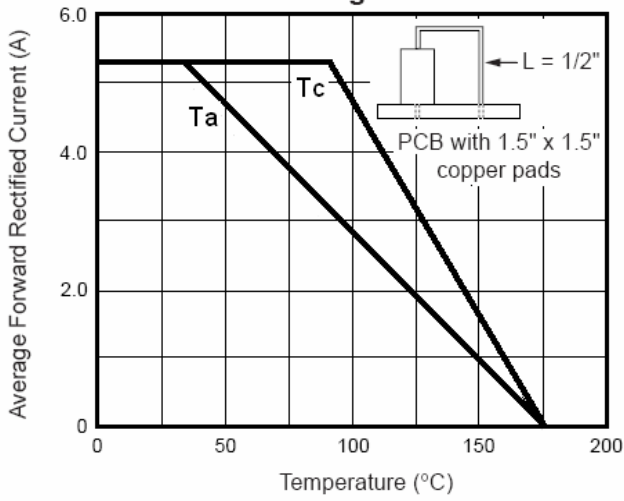


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

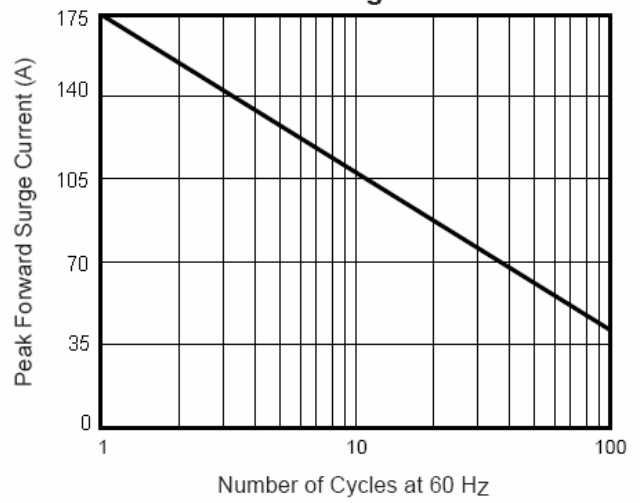


Fig. 3 – Typical Instantaneous Forward Characteristics

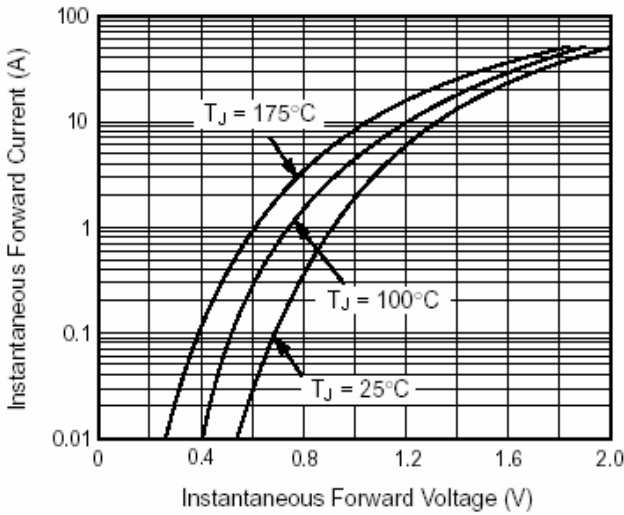


Fig. 4 – Typical Reverse Characteristics

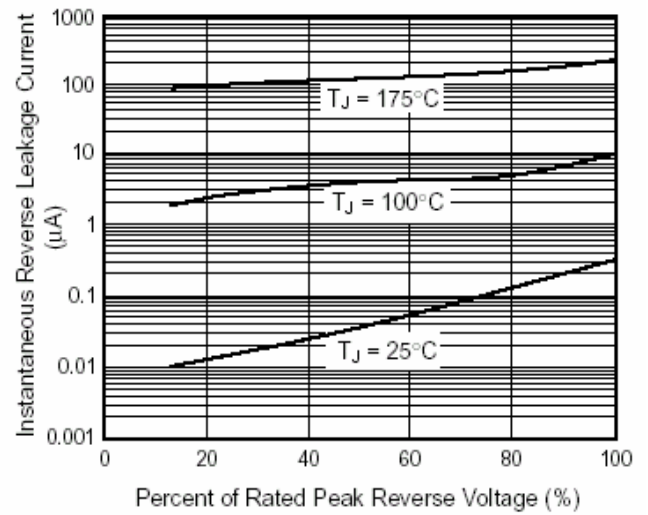


Fig. 5 – Typical Junction Capacitance per Leg

