

MUR4100

GLASS PASSIVATED JUNCTION Ultra fast Plastic Rectifiers

VOLTAGE: 1000V

CURRENT:4.0A

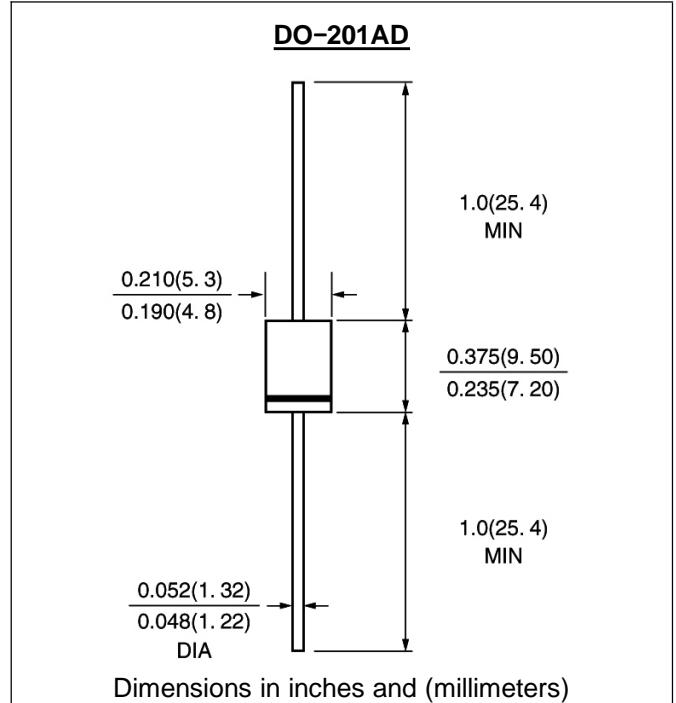


FEATURE

- 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

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	MUR4100	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1000	V
Maximum RMS Voltage	V _{rms}	700	
Maximum DC blocking Voltage	V _{dc}	1000	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}	80	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	1.85	V
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	10 100	μA
Typical thermal resistance junction to ambient (Note 2)	R _{th(ja)}	28	°C/W
Storage and Operating Temperature Range	T _{stg} , T _j	-65 to +175	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Lead length = 1/2" on P.C. board with 1.5" x1.5" copper surface

Fig. 1 – Forward Current Derating Curve

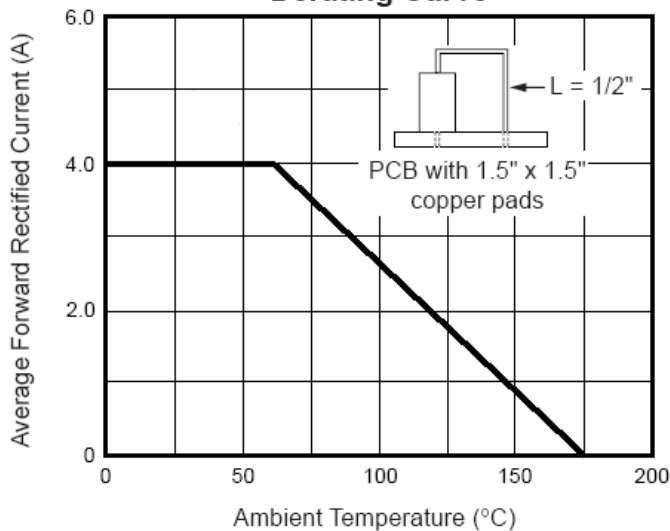


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

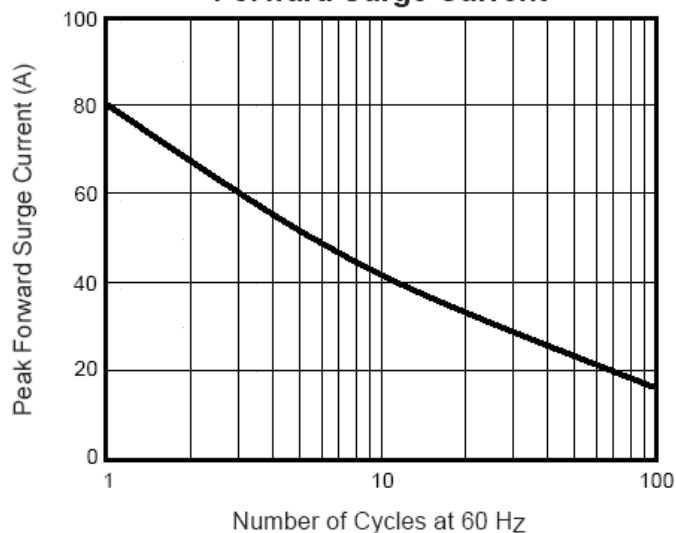


Fig. 3 – Typical Instantaneous Forward Characteristics

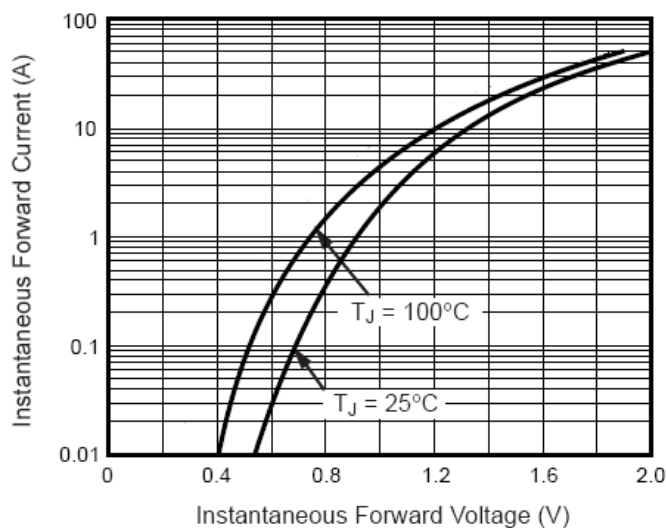


Fig. 4 – Typical Reverse Characteristics

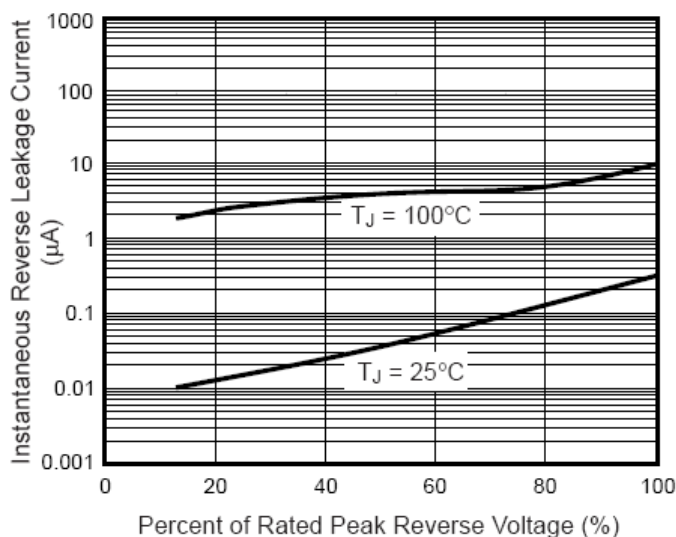


Fig. 5 – Typical Junction Capacitance per Leg

