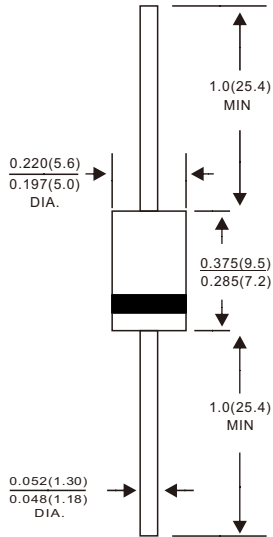


ULTRA FAST RECTIFIERS

Reverse Voltage - 1000Volts Forward Current - 4.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High speed switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260 °C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body
Terminals: Solder plated , solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 ounce, 1.10 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	MUR4100E	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1000	VOLTS
Maximum RMS voltage	V_{RMS}	700	VOLTS
Maximum DC blocking voltage	V_{DC}	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50\text{ }^\circ\text{C}$	$I_{(AV)}$	5.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0	Amps
Maximum instantaneous forward voltage at 4.0A	V_F	1.70	Volts
Maximum DC reverse current $T_A=25\text{ }^\circ\text{C}$ at rated DC blocking voltage $T_A=100\text{ }^\circ\text{C}$	I_R	10.0 300.0	μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	75	ns
Typical junction capacitance (NOTE 2)	C_J	65	pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	28.0	$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

- Note:** 1. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

