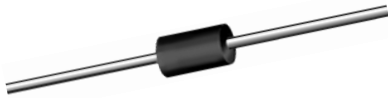


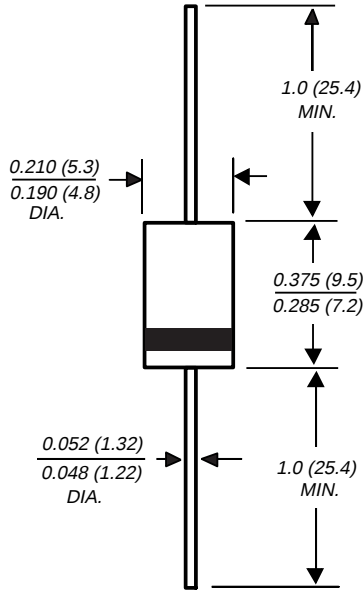
General Purpose Plastic Rectifier

Reverse Voltage 50 to 1000 V

Forward Current 3.0 A



DO-201AD



Dimensions in inches and (millimeters)

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- High surge current capability
- Typical I_R less than 0.1 μ A
- Construction utilizes void-free molded plastic technique
- High current operation of 3.0 Amperes at $T_A=95^\circ\text{C}$ with no thermal runaway
- High temperature soldering guaranteed: 250 $^\circ\text{C}$ /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC DO-201AD, molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.1 grams

Maximum Ratings & Thermal Characteristics

Ratings at 25 $^\circ\text{C}$ ambient temperature unless otherwise specified.

	SYMBOLS	GI 500	GI 501	GI 502	GI 504	GI 506	GI 508	GI 510	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=95^\circ\text{C}$	$I_F(AV)$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	20 5.0							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-50 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-50 to +175							$^\circ\text{C}$

Electrical Characteristics

Ratings at 25 $^\circ\text{C}$ ambient temperature unless otherwise specified.

	SYMBOLS	GI 500	GI 501	GI 502	GI 504	GI 506	GI 508	GI 510	UNITS
Maximum instantaneous forward voltage $T_J=25^\circ\text{C}$ at 9.4A $T_J=175^\circ\text{C}$	V_F	1.1 1.0							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50							μA
Typical reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$	t_{rr}	2.0							μs
Typical junction capacitance at 4.0V, 1MHz	C_J	28							pF

NOTES:

- (1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 0.8 x 0.8" (20 x 20mm) copper heatsinks

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

