

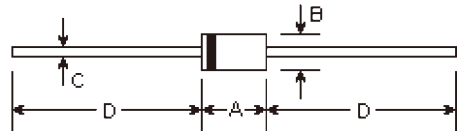


REVERSE VOLTGE 50V~1000V, FORWARD CURRENT 3.0AMP Rectifiers

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- Construction utilizes void-free molded plastic technique
- 3.0 ampere operation at $T_L=105^{\circ}\text{C}$ with no thermal runaway
- Typical I_R less than 0.1 μA
- High temperature soldering guaranteed: 250 $^{\circ}\text{C}$ /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension

DO-201AD



Mechanical Data

- **Case:** 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:** 0.042 ounce, 1.19 grams

DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.283	0.374	7.20	9.50	
B	0.189	0.208	4.80	5.30	φ
C	0.048	0.051	1.20	1.30	φ
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

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

	Symbols	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC blocking voltage to $T_A=150^{\circ}\text{C}$	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current 0.5" (12.5mm) lead length at $T_L=105^{\circ}\text{C}$	$I_{(AV)}$	3.0									Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) at $T_L=105^{\circ}\text{C}$	I_{FSM}	200.0									Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.95									Volts
Maximum DC reverse current at rated DC blocking voltage $T_J=25^{\circ}\text{C}$ $T_A=150^{\circ}\text{C}$	I_R	10.0 300.0									μA
Typical junction capacitance (Note 1)	C_J	30.0									pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	20.0									$^{\circ}\text{C}/\text{W}$
Maximum DC blocking voltage temperature	T_A	+150									$^{\circ}\text{C}$
Operating junction temperature range	T_J	-50 to +170									$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-50 to +170									$^{\circ}\text{C}$

Notes:

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0 volts
- (2) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted with 0.8X0.8" (20X20mm) copper heat sinks



RATINGS AND CHARACTERISTIC CURVES

