

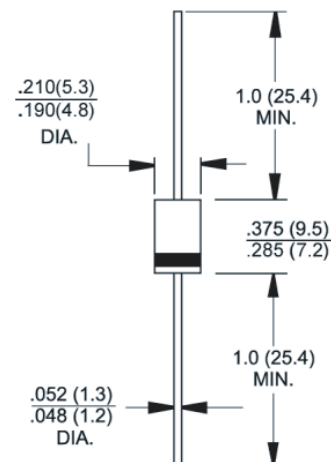


1N5400 thru 1N5408

3.0 Amps. General Purpose Plastic Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 3.0 Amperes

Plastic package has Underwriters Laboratories Flammability Classification 94V-0
High surge current capability
Construction utilizes void-free molded plastic technique
3.0 Amperes 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°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

DO-201AD



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: 0.042 ounce, 1.19 grams

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameters	Symbol	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	60/8065 1N5408	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 $T_L=105^\circ\text{C}$	$I_{F(AV)}$	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_L=105^\circ\text{C}$	I_{FSM}	200.0									Amps
Maximum full load reverse current full cycle average, 0.5" (12.5mm) lead length at $T_L=105^\circ\text{C}$	$I_{R(AV)}$	500									μA
Maximum instantaneous forward voltage at 3.0A	V_F	1.2									Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$ 10.0 $T_A=100^\circ\text{C}$ 500									μA
Typical junction capacitance at 4.0V, 1MHz	C_J	30									pF
Typical thermal resistance (Note 1)	R_{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. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted with 0.81 x 0.81 (20 x 20mm) copper heatsinks

RATINGS AND CHARACTERISTIC CURVES

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

