

I. General Purpose Rectifier

3.0A Silicon Rectifier

1N5400~1N5408

(Package: DO-201AD)

<p><u>FEATURES</u></p> <ul style="list-style-type: none"> • The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 • Construction utilizes void-free molded plastic technique • Low reverse leakage • High forward surge current capability • High temperature soldering guaranteed : 250 /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension <p><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> • 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, 1.10 grams 	<p>Case: DO-201AD Dimensions in inches and (millimeters)</p>
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Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	1N	1N	1N	1N	1N	1N	1N	1N	1N	Units
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
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	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_a = 75$	I_O	3.0									Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100									Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.2									Volts
Maximum DC reverse current $T_a = 25$ at rated DC blocking voltage $T_a = 100$	I_R	10 250									μA
Typical junction capacitance (Note 1)	C_j	30.0									pF
Typical thermal resistance (Note 2)	R_{th-JA}	20.0									/ W
Operating junction and storage temperature range	T_j, T_{stg}	- 65 to +175									

Note :

1. Measured at 1MHz and applied reverse voltage of 4.0 V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Ratings and Characteristic Curves of 1N5400~1N5408

