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## 1N5400 thru 1N5408 Axial Lead Standard Recovery Silicon Rectifiers, 3 Amp, DO-201AD

**Features:**

- 3 Amp Operation at  $T_A = +75^\circ\text{C}$  with no Thermal Runaway
- High Current Capability
- Low Leakage

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified, Note 1)

Peak Repetitive Reverse Voltage,  $V_{RRM}$

DC Reverse Voltage,  $V_R$

1N5400	50V
1N5401	100V
1N5402	200V
1N5403	300V
1N5404	400V
1N5405	500V
1N5406	600V
1N5407	800V
1N5408	1000V

Maximum RMS Voltage

1N5400	35V
1N5401	70V
1N5402	140V
1N5403	210V
1N5404	280V
1N5405	350V
1N5406	420V
1N5407	560V
1N5408	700V

Average Rectified Current (.375" Lead Length,  $T_A = +75^\circ\text{C}$ ),  $I_O$  ..... 3A

Peak Forward Surge Current,  $I_{F(surge)}$

(Superimposed on a Rated Load, 8.3ms Single Half-Sine Wave) ..... 200A

Total Device Dissipation,  $P_D$  ..... 6.25W

Derate Above  $+25^\circ\text{C}$  ..... 50mW/ $^\circ\text{C}$

Operating Junction Temperature Range,  $T_J$  .....  $-55^\circ$  to  $+150^\circ\text{C}$

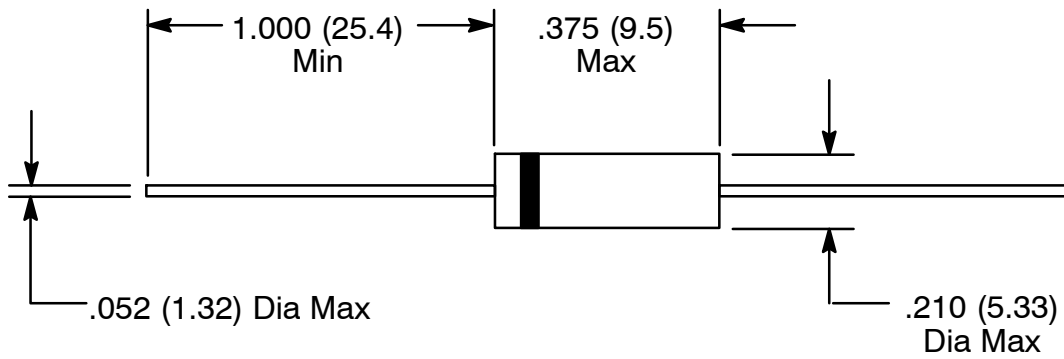
Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+150^\circ\text{C}$

Thermal Resistance, Junction-to-Ambient,  $R_{thJA}$  .....  $+20^\circ\text{C/W}$

Note 1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Maximum Reverse Current	$I_R$	Rated DC Voltage	$T_A = +25^\circ\text{C}$	-	-	5.0	$\mu\text{A}$
			$T_A = +100^\circ\text{C}$	-	-	500	$\mu\text{A}$
Maximum Forward Voltage	$V_F$	$i_F = 3\text{A}$	-	-	1.2	V	
Average Reverse Current	$I_{R(AV)}$	Full Cycle, $T_A = +105^\circ\text{C}$	-	-	0.5	mA	
Junction Capacitance		$V_R = 4\text{V}$ , $f = 1\text{MHz}$	-	30	-	pF	



Color Band Denotes Cathode