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## NTE5800 thru NTE5809 Axial Lead Standard Recovery Silicon Rectifiers, 3 Amp, DO-201AD

**Description:**

The NTE5800 through NTE5809 silicon rectifiers are designed for use in power supplies and other applications having need of a device with the following features:

**Features:**

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single Phase, half wave, 60Hz, relative or inductive load. For capacitive load, derate current by 20%)

Peak Repetitive Reverse Voltage,  $V_{RRM}$

Working Peak Reverse Voltage,  $V_{RWM}$

DC Blocking Voltage,  $V_R$

NTE5800	50V
NTE5801	100V
NTE5802	200V
NTE5803	300V
NTE5804	400V
NTE5805	500V
NTE5806	600V
NTE5808	800V
NTE5809	1000V

Maximum RMS Reverse Voltage,  $V_{R(RMS)}$

NTE5800	35V
NTE5801	70V
NTE5802	140V
NTE5803	210V
NTE5804	280V
NTE5805	350V
NTE5806	420V
NTE5808	560V
NTE5809	700V

Average Rectified Current ( $T_A = +75^\circ\text{C}$  Note 1),  $I_O$  . . . . . 3A

Peak Forward Surge Current,  $I_{FSM}$

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

Operating Junction Temperature Range,  $T_J$  . . . . .  $-65^\circ$  to  $+125^\circ\text{C}$

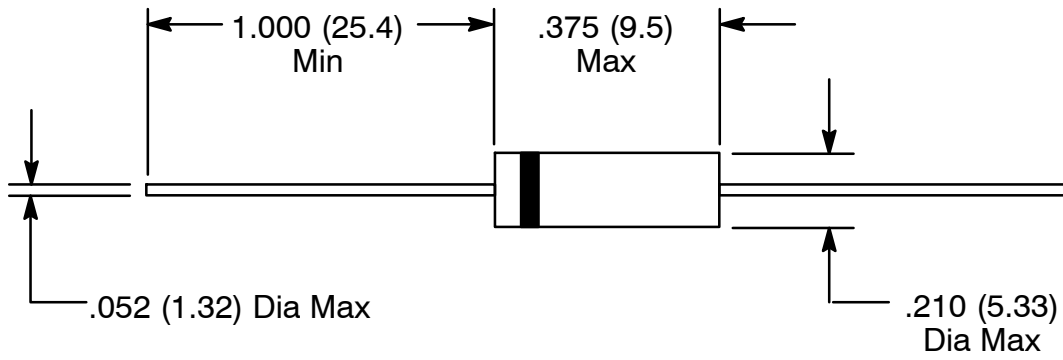
Storage Temperature Range,  $T_{stg}$  . . . . .  $-65^\circ$  to  $+150^\circ\text{C}$

Thermal Resistance, Junction-to-Ambient (Note 1),  $R_{thJA}$  . . . . .  $+20^\circ\text{C/W}$

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single Phase, half wave, 60Hz, relative or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Peak Reverse Current	$I_{RM}$	Rated DC Blocking Voltage	$T_A = +25^\circ\text{C}$	-	-	5.0	$\mu\text{A}$
			$T_A = +100^\circ\text{C}$	-	-	100	$\mu\text{A}$
Maximum Forward Voltage	$V_{FM}$	$i_F = 3\text{A}$	-	-	1.0	V	
Junction Capacitance		$V_R = 4\text{V}, f = 1\text{MHz}$	-	30	-	pF	



Color Band Denotes Cathode