



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE5800 thru NTE5809 Axial Lead Standard Recovery Silicon Rectifiers, 3 Amp, DO27

**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:

- High Current to Small Size
- High Surge Current Capability
- Low Forward Voltage Drop

**Absolute Maximum Ratings:** (Note 1)

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

Non-Repetitive Peak Reverse Voltage,  $V_{RSM}$

NTE5800	100V
NTE5801	200V
NTE5802	400V
NTE5803	425V
NTE5804	525V
NTE5805	625V
NTE5806	800V
NTE5808	1000V
NTE5809	1200V

Average Rectified Forward Current,  $I_O$

(Single Phase Resistive Load, 1/2" Leads,  $T_L = +105^\circ\text{C}$ ) ..... 3A

Non-Repetitive Peak Surge Current,  $I_{FSM}$

(Surge Applied at Rated Load Conditions, One Cycle) ..... 200A

Operating Junction Temperature Range,  $T_J$  .....  $-65^\circ$  to  $+175^\circ\text{C}$

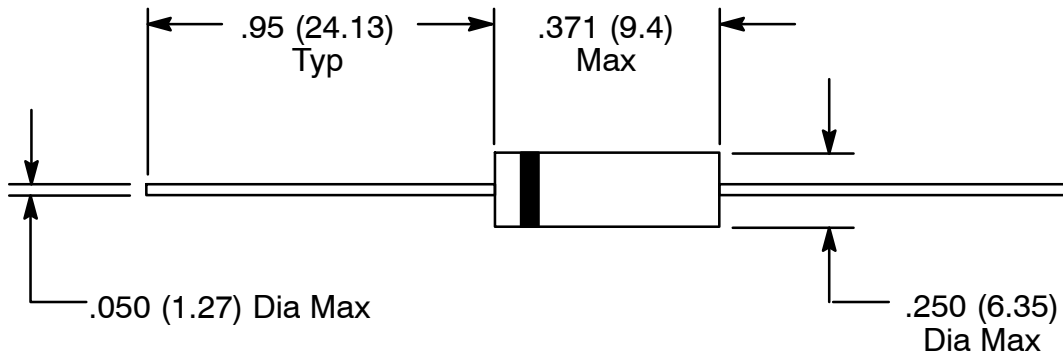
Storage Junction Temperature Range,  $T_{stg}$  .....  $-65^\circ$  to  $+175^\circ\text{C}$

Thermal Resistance, Junction-to-Ambient (PC Board Mount, 1/2" Leads),  $R_{thJA}$  .....  $+53^\circ\text{C/W}$

**Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	$v_F$	$i_F = 9.4A$ , Note 1	-	-	1.2	V
Average Reverse Current	$I_{R(AV)}$	Note 1	-	-	500	A
DC Reverse Current	$I_R$	Rated DC Voltage, $T_L = 150^\circ C$	-	-	500	A

Note 1. Measured in a single-phase half-wave circuit and operated at rated load conditions:  
 $T_L = 105^\circ C$ .  $I_O = 3A$ .  $V_r = V_{RWM}$ .



Color Band Denotes Cathode