



## **NTE5826 thru NTE5829 Silicon Power Rectifier Diode, 50 Amp, Press Fit**

### **Description:**

The NTE5826 thru NTE5829 are silicon power rectifier diodes in a press-fit type package designed for use in all medium-current applications or for higher current industrial alternators and chassis mounted power supply rectifiers.

### **Features:**

- 50 Amp @  $T_C = +150^\circ\text{C}$
- 600 Amp Surge Capability
- Rugged Construction
- Available in Standard (NTE5826, NTE5828) and Reverse (NTE5827, NTE5829) Polarity

### **Absolute Maximum Ratings:**

Peak Repetitive Reverse Voltage,  $V_{RRM}$

NTE5826, NTE5827*	400V
NTE5828, NTE5829*	800V

Working Peak Reverse Voltage,  $V_{RWM}$

NTE5826, NTE5827*	400V
NTE5828, NTE5829*	800V

DC Blocking Voltage,  $V_B$

NTE5826, NTE5827*	400V
NTE5828, NTE5829*	800V

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

NTE5826, NTE5827*	450V
NTE5828, NTE5829*	850V

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

NTE5826, NTE5827*	280V
NTE5828, NTE5829*	560V

Average Rectified Forward Current (Single phase, resistive load,  $T_C = +150^\circ\text{C}$ ),  $I_O$  ..... 50A

Non-Repetitive Peak Surge Current (Surge applied at rated load conditions),  $I_{FSM}$  ..... 600A

Operating Junction Temperature Range,  $T_J$  .....  $-65^\circ$  to  $+195^\circ\text{C}$

Storage Temperature Range,  $T_{stg}$  .....  $-65^\circ$  to  $+195^\circ\text{C}$

Maximum Thermal Resistance, Junction-to-Case,  $R_{thJC}$  .....  $0.8^\circ\text{C/W}$

Note 1. Standard polarity is cathode to case, (\*) indicated anode to case.

### **Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	$V_F$	$i_F = 157\text{A}, T_J = +25^\circ\text{C}$	–	1.10	1.18	V
		$i_F = 50\text{A}, T_J = +25^\circ\text{C}$	–	0.95	1.00	V
Reverse Current	$i_R$	$V_{RRM} = \text{Rated Voltage}, T_C = +25^\circ\text{C}$	–	0.05	0.2	mA
		$V_{RRM} = \text{Rated Voltage}, T_C = +150^\circ\text{C}$	–	1.0	2.0	mA

Rev. 6-17



