

## NTE5826 thru NTE5829 Silicon Power Rectifier Diode, 50 Amp

### **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 Currnt (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

