

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 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° to $+195^\circ\text{C}$			
Storage Temperature Range, T_{stg}		.....	-65° to $+195^\circ\text{C}$			
Maximum Thermal Resistance, Junction-to-Case, R_{thJC}		.....	0.8°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

