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NTE5828 & NTE5829 Power Rectifier Diode, 50 Amp, Press Fit

Description:

The NTE5828 and 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 (NTE5828) and Reverse (NTE5829) Polarity

Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM}	800V
NTE5828, NTE5829*	
Working Peak Reverse Voltage, V_{RWM}	800V
NTE5828, NTE5829*	
DC Blocking Voltage, V_B	800V
NTE5828, NTE5829*	
Non-Repetitive Peak Reverse Voltage, V_{RSM}	850V
NTE5828, NTE5829*	
RMS Reverse Voltage, $V_{R(RMS)}$	560V
NTE5828, NTE5829*	
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	$V_{RRM} = 800\text{V}, T_C = +25^\circ\text{C}$	-	0.05	0.2	mA
		$V_{RRM} = 800\text{V}, T_C = +150^\circ\text{C}$	-	1.0	2.0	mA

Rev. 7-19



