

NTE588 Silicon Diode 150V, 3A, Ultra Fast Switch

Features:

- High Reliability
- Low Leakage
- Low Forward Voltage
- High Current Capability
- Super Fast Switching Speed < 35nS
- High Surge Capability
- Good for 200kHz Power Supplier

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Maximum Recurrent Peak Reverse Voltage	150V
Maximum RMS Voltage	105V
Maximum DC Blocking Voltage	150V
Maximum Average Forward Current (.375" (9.5mm) lead length at $T_A = +55^\circ\text{C}$)	3A
Peak Forward Surge Current, I_{FM} surge	
8.3ms single half sine-wave superimposed on rated load	125A
Maximum Forward Voltage at 3.0A DC	0.95V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5 μA
Maximum DC Reverse Current at Rated DC Blocking Voltage, $T_A = 150^\circ\text{C}$	50 μA
Maximum Reverse Recovery Time (Note 1)	35ns
Typical Junction Capacitance (Note 2)	155pF
Operating and Storage Temperature Range, T_J, T_{stg}	-65° to +150°C

Note 1. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

Note 2. Measured at 1MHz and applied reverse voltage of 4.0 volts.

