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## NTE580-1 General Purpose Silicon Rectifier Ultra Fast Recovery DO201AD Type Package

**Features:**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

**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 Peak Repetitive Reverse Voltage, $V_{RRM}$ .....	600V
Maximum Working Peak Reverse Voltage, $V_{RWM}$ .....	600V
Maximum DC Blocking Voltage, $V_R$ .....	600V
Maximum RMS Reverse Voltage, $V_{R(RMS)}$ .....	420V
Maximum Average Rectified Output Current (.375" (9.5mm) Lead Length, $T_A = +55^\circ\text{C}$ ), $I_O$ ....	3A
Non-Repetitive Peak Forward Surge Current, $I_{FSM}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	150A
Maximum Instantaneous Forward Voltage ( $I_F = 3A$ ), $V_{FM}$ .....	1.7V
Maximum Peak Reverse Current ( $V_R = 600V$ ), $I_{RM}$ $T_A = +25^\circ\text{C}$ .....	10 $\mu\text{A}$
$T_A = +100^\circ\text{C}$ .....	100 $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1), $t_{rr}$ .....	75ns
Typical Junction Capacitance (Note 2), $C_j$ .....	50pF
Operating Junction Temperature Range, $T_J$ .....	-65° to +125°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +150°C

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

Note 2. Measured at 1MHz and applied reverse voltage of 4V.

