



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} $T_A = +25^\circ\text{C}$	10µA
$T_A = +100^\circ\text{C}$	100µA
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.

