



## NTE6248 Silicon Fast Rectifier

### Features:

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

### Maximum Ratings and Electrical Characteristics:

( $T_A = +25^\circ\text{C}$  unless otherwise specified. Resistive or inductive load.)

Maximum Recurrent Peak Reverse Voltage, $V_{RRM}$ .....	600V
Maximum Average Rectified Forward Current (.375 (9.5) Lead Length, $T_C = +100^\circ\text{C}$ ), $I_{F(AV)}$ ..	16A
Non-Repetitive Peak Forward Surge Current (8.3ms Single Half Sine-Wave), $I_{FSM}$ .....	250A
Power Dissipation, $P_D$ .....	7.81W
Maximum Instantaneous Forward Voltage ( $I_F = 16\text{A}$ ), $V_F$ .....	1.5V
Maximum DC Reverse Current (Rated DC Blocking Voltage), $I_R$	
$T_A = +25^\circ\text{C}$ .....	10 $\mu\text{A}$
$T_A = +100^\circ\text{C}$ .....	500 $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1), $t_{rr}$ .....	50ns
Total Capacitance (Note 2), $C_T$ .....	145pF
Thermal Resistance, Junction-to-Ambient, $R_{thJA}$ .....	16 $^\circ\text{C}/\text{W}$
Thermal Resistance, Junction-to-Lead, $R_{thJL}$ .....	1.2 $^\circ\text{C}/\text{W}$
Operating Junction Temperature Range, $T_J$ .....	-65 $^\circ$ to +150 $^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	-65 $^\circ$ to +150 $^\circ\text{C}$

Note 1. Reverse Recovery Test Conditions:  $I_F = 500\text{mA}$ ,  $I_R = 1\text{A}$ ,  $I_{RR} = 250\text{mA}$ .

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

