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## NTE6248 Silicon Schottky Barrier Rectifier

**Features:**

- Guarding for Stress Protection
- Low Forward Voltage
- High Current Capability
- High Surge 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 RMS Voltage, $V_{RMS}$ .....	420V
Maximum DC Blocking Voltage, $V_{DC}$ .....	600V
Maximum Average Rectified Forward Current ( $T_C = +100^\circ\text{C}$ ), $I_{F(AV)}$ .....	16A
Peak Forward Surge Current, $I_{FSM}$ (8.3ms single half sine-wave superimposed on rated load) .....	250A
Maximum Instantaneous Forward Voltage ( $I_F = 16\text{A}$ ), $V_F$ .....	1.5V
Maximum DC Reverse Current (rated DC Blocking Voltage), $I_R$ $T_C = +25^\circ\text{C}$ .....	10 $\mu\text{A}$
$T_C = +100^\circ\text{C}$ .....	500 $\mu\text{A}$
Maximum Reverse Recovery Time ( $T_J = +25^\circ\text{C}$ , Note 1), $T_{RR}$ .....	50ns
Typical Junction Capacitance (Note 2), $C_J$ .....	145pF
Typical Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	1.5 $^\circ\text{C/W}$
Operating Junction Temperature Range, $T_J$ .....	-55 $^\circ$ to +175 $^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	-55 $^\circ$ to +175 $^\circ\text{C}$

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

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

