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## NTE648 Schottky Barrier Silicon Rectifier Low Voltage, High Frequency DO-201AD Type Package

**Features:**

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Surge Overload Rating to 80A Peak
- Low Power Loss, High Efficiency

**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%)

Peak Repetitive Reverse Voltage, $V_{RRM}$ .....	200V
Working Peak Reverse Voltage, $V_{RWM}$ .....	200V
DC Blocking Voltage, $V_R$ .....	200V
RMS Reverse Voltage, $V_{R(RMS)}$ .....	140V
Average Rectified Output Current (Note 1), $I_O$ .....	3A
Non-Repetitive Peak Forward Surge Current, $I_{FSM}$ (8.3ms Single Half Sine-Wave Superimposed on Rated Load) .....	80A
Forward Voltage ( $I_F = 3A$ ), $V_{FM}$ .....	0.9V
Peak Reverse Current (At Rated DC Blocking Voltage), $I_{RM}$ $T_J = +25^\circ\text{C}$ .....	0.2mA
$T_J = +100^\circ\text{C}$ .....	5mA
Typical Junction Capacitance (Note 2), $C_j$ .....	80pF
Operating Junction Temperature Range, $T_J$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Thermal Resistance (Note 3) Junction-to-Ambient, $R_{thJA}$ .....	$28^\circ\text{C/W}$
Junction-to-Lead, $R_{thJL}$ .....	$10^\circ\text{C/W}$

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case..

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

Note 3. Vertical PCB mounting with 12.7mm lead length on 63.5 x 63.5mm copper pad.

