

NTE646 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}	100V
Working Peak Reverse Voltage, V_{RWM}	100V
DC Blocking Voltage, V_R	100V
RMS Reverse Voltage, $V_{R(RMS)}$	70V
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}	0.85V
Peak Reverse Current (At Rated DC Blocking Voltage), I_{RM}	
$T_J = +25^\circ\text{C}$	0.5mA
$T_J = +100^\circ\text{C}$	20mA
Typical Junction Capacitance (Note 2), C_j	140pF
Operating Junction Temperature Range, T_J	-65° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+150^\circ\text{C}$
Thermal Resistance (Note 3)	
Junction-to-Ambient, R_{thJA}	28°C/W
Junction-to-Lead, R_{thJL}	10°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.

