ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089
http://www.nteinc.com

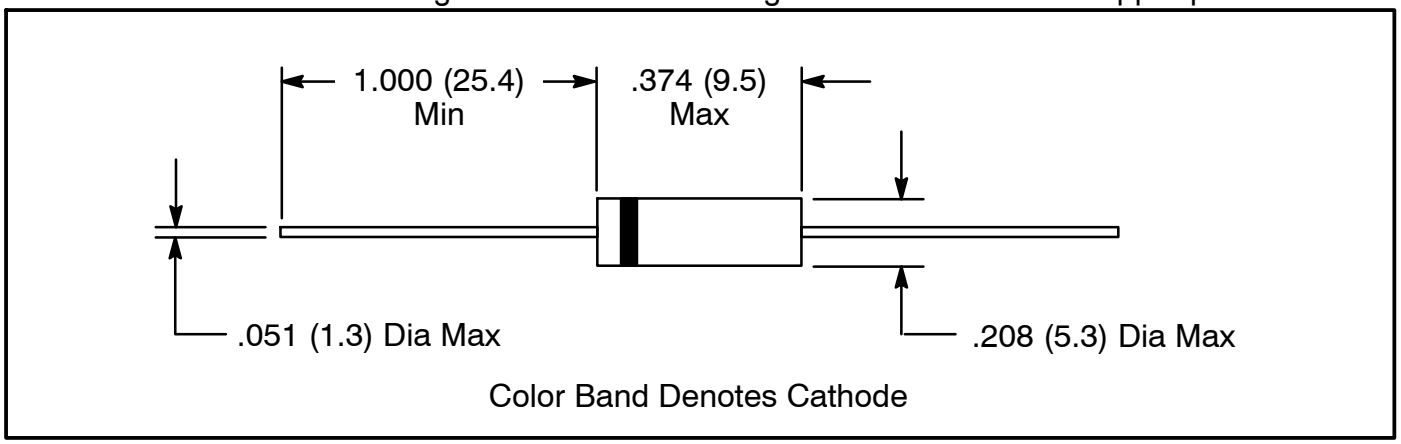
NTE646
Schottky Barrier Silicon Rectifier
Low Voltage, High Frequency
DO–201AD Type Package

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°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°C 0.5mA
T_J = +100°C 20mA
Typical Junction Capacitance (Note 2), C_j 140pF
Operating Junction Temperature Range, T_J . . . . . –65° to +150°C
Storage Temperature Range, T_{stg} . . . . . –65° to +150°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.



RoHS 2002/95/EC