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

NTE53000 thru NTE53004
Single Phase Bridge Rectifier
10 Amp

Features:

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Applications

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%)

Maximum DC Blocking Voltage, V_{RM}
- NTE53000 . . . . . 200V
- NTE53001 . . . . . 400V
- NTE53002 . . . . . 600V
- NTE53003 . . . . . 800V
- NTE53004 . . . . . 1000V

Working Peak Reverse Voltage, V_{RWM}
- NTE53000 . . . . . 200V
- NTE53001 . . . . . 400V
- NTE53002 . . . . . 600V
- NTE53003 . . . . . 800V
- NTE53004 . . . . . 1000V

Maximum Peak Recurrent Reverse Voltage, V_{RRM}
- NTE53000 . . . . . 200V
- NTE53001 . . . . . 400V
- NTE53002 . . . . . 600V
- NTE53003 . . . . . 800V
- NTE53004 . . . . . 1000V

RMS Reverse Voltage, $V_{R(RMS)}$
- NTE53000 . . . . . 140V
- NTE53001 . . . . . 280V
- NTE53002 . . . . . 420V
- NTE53003 . . . . . 560V
- NTE53004 . . . . . 700V

Thermal Energy (Rating for Fusing, t < 8.3ms, Note 1), I^2t . . . . . 64 $Amps^2/Sec$

Non−Repetitive Peak Forward Surge Current, I_{FSM}
(Single Half−Sine Wave Superimposed on Rated Load, 8.3ms) 200A

Average Forward Rectified Current (T_A = +50°C, Note 2), I_O 10A

Note 1. Non−repetitive, for t > 1ms and < 8.3ms.
Note 2. Mounted on heatsink.

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%)

Maximum Forward Voltage (Per Diode at 5A DC), V_{FM} 1.1V

Maximum Reverse Current (at Rated V_{RM}), I_{RM}

T_C = +25°C 10µA

T_C = +100°C 1mA

Typical Junction Capacitance (Note 3), C_J 110pF

Operating Junction Temperature Range, T_J . . . . . −65° to +125°C

Storage Temperature Range, T_{stg} . . . . . −65° to +120°C

Typical Thermal Resistance, Junction−to−Case (Per Diode), R_{thJC} 7.5K/W

Note 3. Measured at 1MHz and applied reverse voltage of 4VDC.