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NTE53006 thru NTE53010 Silicon Bridge Rectifier, 15A

Features:

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for PC Boards
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified.
Single Phase, Half Wave, 60Hz, Resistive or Inductive Load, Note 1.)

Maximum Recurrent Peak Reverse Voltage, V_{RRM}

NTE53006	200V
NTE53008	600V
NTE53010	1000V

Working Peak Reverse Voltage, V_{RWM}

NTE53006	200V
NTE53008	600V
NTE53010	1000V

Maximum RMS Bridge Input Voltage, V_{RMS}

NTE53006	140V
NTE53008	420V
NTE53010	700V

Maximum DC Blocking Voltage, V_{DC}

NTE53006	200V
NTE53008	600V
NTE53010	1000V

Maximum Average Forward Rectified Output Current ($T_C = +100^\circ\text{C}$, Note 2), $I_{O(AV)}$ 15A

Peak Forward Surge Current (8.3ms single half wave superimposed on rated load), I_{FSM} . . . 240A

Maximum Forward Voltage Drop (Per element at 7.5A), V_F 1.05V

Maximum Reverse Current at Rated DC Blocking Voltage Per Element, I_R

$T_A = +25^\circ\text{C}$	10 μA
$T_A = +125^\circ\text{C}$	250 μA

Typical Thermal Resistance (Per element)

Junction-to-Ambient (Note 3), R_{thJA}	22 $^\circ\text{C/W}$
Junction-to-Case (Note 2), R_{thJC}	1.5 $^\circ\text{C/W}$

Operating Temperature Range, T_J -55° to $+150^\circ\text{C}$

Storage Temperature Range, T_{stg} -55° to $+150^\circ\text{C}$

Note 1. For capacitive load, derate current by 20%.

Note 2. Device mounted on a 300mm x 300mm x 1.6mm thick Cu plate heatsink.

Note 3. Device mounted on a PC board without heatsink.

