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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 $\mu\text{A}$
$T_A = +125^\circ\text{C}$ .....	250 $\mu\text{A}$
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 $^\circ$ to +150 $^\circ\text{C}$	
Storage Temperature Range, $T_{stg}$ .....	
-55 $^\circ$ 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.

