NTE5309 thru NTE5311
Single Phase Bridge Rectifier
4 Amp

Features:
● Diffused Junction
● Low Forward Voltage Drop
● High Current Capability
● High Reliability
● High Surge Current Capability
● Ideal For Printed Circuit Boards

Maximum Ratings and Electrical Characteristics: \( (T_A = +25^\circ C \text{ unless otherwise specified. Single Phase, Half Wave, } 60\text{Hz, Resistive or Inductive Load. For Capacitive Load, Derate Current by } 20\%) \)

Peak Repetitive Reverse Voltage, \( V_{RRM} \)
- NTE5309: 200V
- NTE5310: 600V
- NTE5311: 1000V

Working Peak Reverse Voltage, \( V_{RWM} \)
- NTE5309: 200V
- NTE5310: 600V
- NTE5311: 1000V

DC Blocking Voltage, \( V_R \)
- NTE5309: 200V
- NTE5310: 600V
- NTE5311: 1000V

RMS Reverse Voltage, \( V_{R(RMS)} \)
- NTE5309: 140V
- NTE5310: 420V
- NTE5311: 700V

Average Rectified Output Current \( (T_C = +75^\circ C), I_O \) .......... 4A

Non-Repetitive Peak Forward Surge Current, \( I_{FSM} \)
\( (8.3\text{ms Single Half Sine-Wave Superimposed on Rated Load}) \) .......... 150A

Forward Voltage Drop (Per Bridge Element, \( I_F = 2A \)), \( V_{FM} \) .......... 1.1V

Peak Reverse Current (at Rated DC Blocking Voltage per Element), \( I_R \)
\( T_C = +25^\circ C \) .......... 10\( \mu A \)
\( T_C = +100^\circ C \) .......... 1mA

Rating for Fusing (\( t < 8.3\text{ms, Note 1}) \), \( I^2t \) .......... 166A^2s

Typical Thermal Resistance, Junction-to-Case (Note 2), \( R_{thJC} \) .......... 19K/W

Operating Junction Temperature Range, \( T_J \) .......... \(-65^\circ C \text{ to } +125^\circ C \)

Storage Temperature Range, \( T_{stg} \) .......... \(-65^\circ C \text{ to } +125^\circ C \)