



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

NTE5390 thru NTE5394 Silicon Bridge Rectifier, 35A

Features:

- Low Leakage
- Low Forward Voltage
- High Forward Surge Current Capability
- Surge Overload Rating: 300A Peak
- 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}	
NTE5390	200V
NTE5391	400V
NTE5392	600V
NTE5393	800V
NTE5394	1000V
Maximum RMS Bridge Input Voltage, V_{RMS}	
NTE5390	140V
NTE5391	280V
NTE5392	420V
NTE5393	560V
NTE5394	700V
Maximum DC Blocking Voltage, V_{DC}	
NTE5390	200V
NTE5391	400V
NTE5392	600V
NTE5393	800V
NTE5394	1000V
Maximum Average Forward Rectified Output Current ($T_A = +100^\circ\text{C}$), $I_{O(AV)}$	
35A	
Peak Forward Surge Current (8.3ms single half wave superimposed on rated load), I_{FSM}	
NTE5391	350A
All Other Devices	300A
Maximum Forward Voltage Drop (Per element at 17.5A), V_F	
1.1V	
Maximum Reverse Current at Rated DC Blocking Voltage Per Element, I_R	
NTE5391	
$T_A = +25^\circ\text{C}$	10 μ A
$T_A = +100^\circ\text{C}$	0.5mA
All Other Devices	
$T_A = +25^\circ\text{C}$	5 μ A
$T_A = +100^\circ\text{C}$	0.2mA

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

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

I^2t rating for Fusing ($t < 8.3\text{ms}$), NTE5391 Only , I^2t	510A ² s
Typical Junction Capacitance (Note 2), NTE5392 Only , C_J	125pF
RMS Isolation Voltage, Terminals to case ($t = 1\text{min}$), NTE5391 Only , V_{ISO}	2500V
Operating Temperature Range, T_J	-55° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$
Thermal Resistance (NTE5391 Only)	
Junction-to-Ambient, R_{thJA}	22°C/W
Junction-to-Case, R_{thJC}	0.8°C/W

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

Note 2. Measured at 1.0Mhz and applied reverse voltage of 4.0VDC.

