

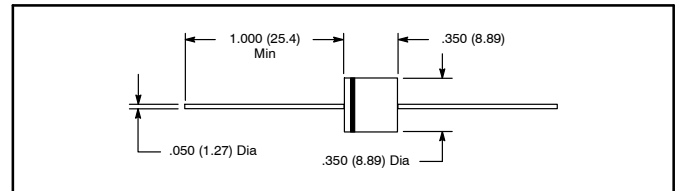


ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE5812 thru NTE5817 6 Amp Plastic Silicon Rectifier

Features:

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified. Single phase half sine-wave 60Hz resistive or inductive load. For capacitive load, derate current by 20%)

Maximum Peak Repetitive Reverse Voltage, V_{RRM}

NTE5812	100V
NTE5814	400V
NTE5815	600V
NTE5817	1000V

Maximum Working Peak Reverse Voltage, V_{RWM}

NTE5812	100V
NTE5814	400V
NTE5815	600V
NTE5817	1000V

Maximum RMS Voltage, $V_{R(RMS)}$

NTE5812	70V
NTE5814	280V
NTE5815	420V
NTE5817	700V

Maximum DC Blocking Voltage, V_R

NTE5812	100V
NTE5814	400V
NTE5815	600V
NTE5817	1000V

Maximum Average Forward Rectified Current ($T_A = +60^\circ\text{C}$, Note 1), I_O

6A	
Non-Repetitive Peak Forward Surge Current, I_{FSM}	
8.3ms single half sine-wave superimposed on rated load	400A

Forward Voltage ($I_F = 6A$), V_{FM}

1V

Peak Reverse Current at Rated DC Blocking Voltage, I_{RM}

$T_J = +25^\circ\text{C}$	5 μ A
$T_J = +100^\circ\text{C}$	1mA

Typical Junction Capacitance (Note 2), C_j

150pF

Typical Thermal Resistance, Junction-to-Ambient (Note 1), R_{thJA}

20 $^\circ\text{C}/\text{W}$

Operating Junction Temperature Range, T_J

-50 $^\circ$ to +150 $^\circ\text{C}$

Storage Temperature Range, T_{stg}

-50 $^\circ$ to +150 $^\circ\text{C}$

Note 1. Lead maintained at ambient temperature at a distance of 9.5mm from the case.

Note 2. Measured at 1MHz and applied reverse voltage of 4V DC.