

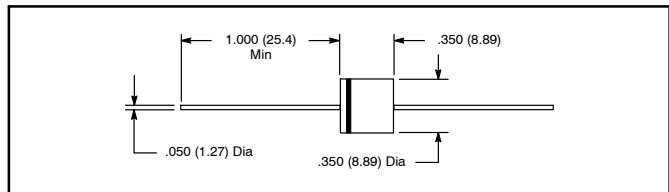


ELECTRONICS, INC.  
44 FARRAND STREET  
BLOOMFIELD, NJ 07003  
(973) 748-5089  
<http://www.nteinc.com>

## 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),  $I_0$  ..... 6A

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

Forward Voltage ( $I_F = 6\text{A}$ ),  $V_{FM}$  ..... 1V

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

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

Typical Junction Capacitance (Note 2),  $C_j$  ..... 150pF

Typical Thermal Resistance, Junction-to-Ambient (Note 1),  $R_{thJA}$  ..... 20°C/W

Operating Junction Temperature Range,  $T_J$  ..... -50° to +150°C

Storage Temperature Range,  $T_{stg}$  ..... -50° to +150°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.