

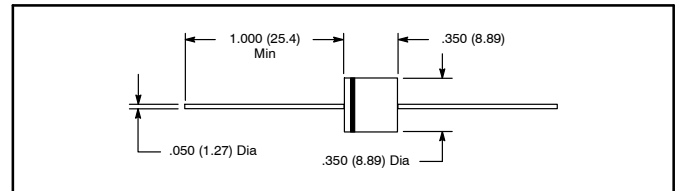


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## NTE5812 thru NTE5817 6 Amp Plastic Silicon Rectifier

**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 $\mu$ 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.