

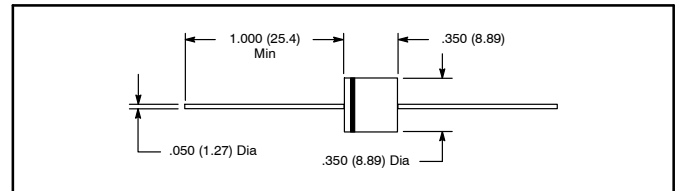


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NTE5812 thru NTE5817 6 Amp Plastic Silicon Rectifier

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 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.