

NTE5812HC thru NTE5817HC 10 Amp Plastic Silicon Rectifier

Features:

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 600A Peak
- Low Reverse Leakage Current

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Maximum Recurrent Peak Reverse Voltage

NTE5812HC	100V
NTE5814HC	400V
NTE5815HC	600V
NTE5817HC	1000V

Maximum RMS Voltage

NTE5812HC	70V
NTE5814HC	280V
NTE5815HC	420V
NTE5817HC	700V

Maximum DC Blocking Voltage

NTE5812HC	100V
NTE5814HC	400V
NTE5815HC	600V
NTE5817HC	1000V

Average Forward Current ($T_A = +50^\circ\text{C}$), $I_{F(AV)}$ 10A

Peak Forward Surge Current (8.3ms, Half Sine), I_{FSM} 400A

Maximum Instantaneous Forward Voltage ($I_{FM} = 10\text{A}$, $T_A = +25^\circ\text{C}$), V_F 1.0V

Maximum DC Reverse Current at Rated DC Blocking Voltage, I_R

$T_A = +25^\circ\text{C}$ 10 μA

$T_A = +100^\circ\text{C}$ 100 μA

Typical Junction Capacitance (Measured at 1.0MHz, $V_R = 4\text{V}$), C_J 150pF

Operating Junction Temperature Range, T_J -55° to $+125^\circ\text{C}$

Storage Temperature Range, T_{stg} -55° to $+150^\circ\text{C}$

Typical Thermal Resistance, Junction-to-Ambient, R_{thJA} 10K/W

Note 1. Pulse Test: Pulse Width = 300 μs , Duty Cycle = 1%.

