



ELECTRONICS, INC.
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NTE6106 & NTE6107 Industrial Rectifier, 450A

Features:

- Standard and Reverse Polarities
- Flag Lead and Stud Top Terminals
- High Surge Current Ratings
- High Rated Blocking Voltages

Applications:

- Welders
- Battery Chargers
- Electrochemical Refining
- Metal Reduction
- General Industrial High Current Rectification

Electrical Characteristics:

Voltage (Blocking State Maximums at Maximum T_J)

Repetitive Peak Reverse Voltage, V _{RRM}	
NTE6106, NTE6107*	1600V
Non-Repetitive Transient Peak Reverse Voltage (t ≤ 5.0ms), V _{RSM}	
NTE6106, NTE6107*	1800V
Reverse Leakage Current (Peak), I _{RRM}	50mA

Current (Conducting State Maximums)

RMS Forward Current, I _{F (RMS)}	700A
Average Forward Current, I _{F (AV)}	450A
Surge Current, I _{FSM}	
1/2 Cycle	8500A
3 Cycle	6400A
10 Cycle	5100A
Forward Voltage Drop, V _{FM}	
(I _{FM} = 1500A, T _J = +25°C)	1.6V
I ² t for Fusing (for times = 8.3ms), I ² t	266,000A ² sec

Note 1. * Indicates reverse (anode to case) polarity.

Electrical Characteristics (Cont'd):

Switching

Typical Reverse Recovery Time, t_{rr}
($I_{FM} = 1500A$, $t_p = 190\mu s$, $diR/dt = 25A/\mu s$, $T_C = +25^\circ C$) $11\mu s$

Thermal and Mechanical

Operating Junction Temperature Range, T_J -65° to $+175^\circ C$
Storage Temperature Range, T_{stg} -65° to $+200^\circ C$
Thermal Resistance, Junction-to-Case, R_{thJC} $0.12^\circ C/W$
Thermal Resistance, Case-to-Sink (Lubricated), R_{thCS} $0.04^\circ C/W$
Maximum Mounting Torque 360in. lb.

