



ELECTRONICS, INC.
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NTE6102 thru NTE6109 Industrial Rectifier, 550 Amp

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}	
NTE6102, NTE6103*	600V
NTE6104, NTE6105*	1200V
NTE6108, NTE6109*	1600V

Non-Repetitive Transient Peak Reverse Voltage (t ≤ 5.0ms), V _{RSM}	
NTE6102, NTE6103*	700V
NTE6104, NTE6105*	1400V
NTE6108, NTE6109*	1700V

Reverse Leakage Current (Peak), I _{RRM}	50mA
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Current (Conducting State Maximums)

RMS Forward Current, I _{F (RMS)}	470A
Average Forward Current, I _{F (AV)}	300A

Surge Current, I _{FSM}	
1/2 Cycle	7000A
3 Cycle	5250A
10 Cycle	4200A

Forward Voltage Drop, V _{FM}	
(I _{FM} = 1500A, T _J = +25°C)	2.15V
(Rated single phase average current and case temperature)	1.45V

I ² t for Fusing (for times = 8.3ms), I ² t	204,000A ² sec
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Note 1. * Indicates reverse (anode to case) polarity.

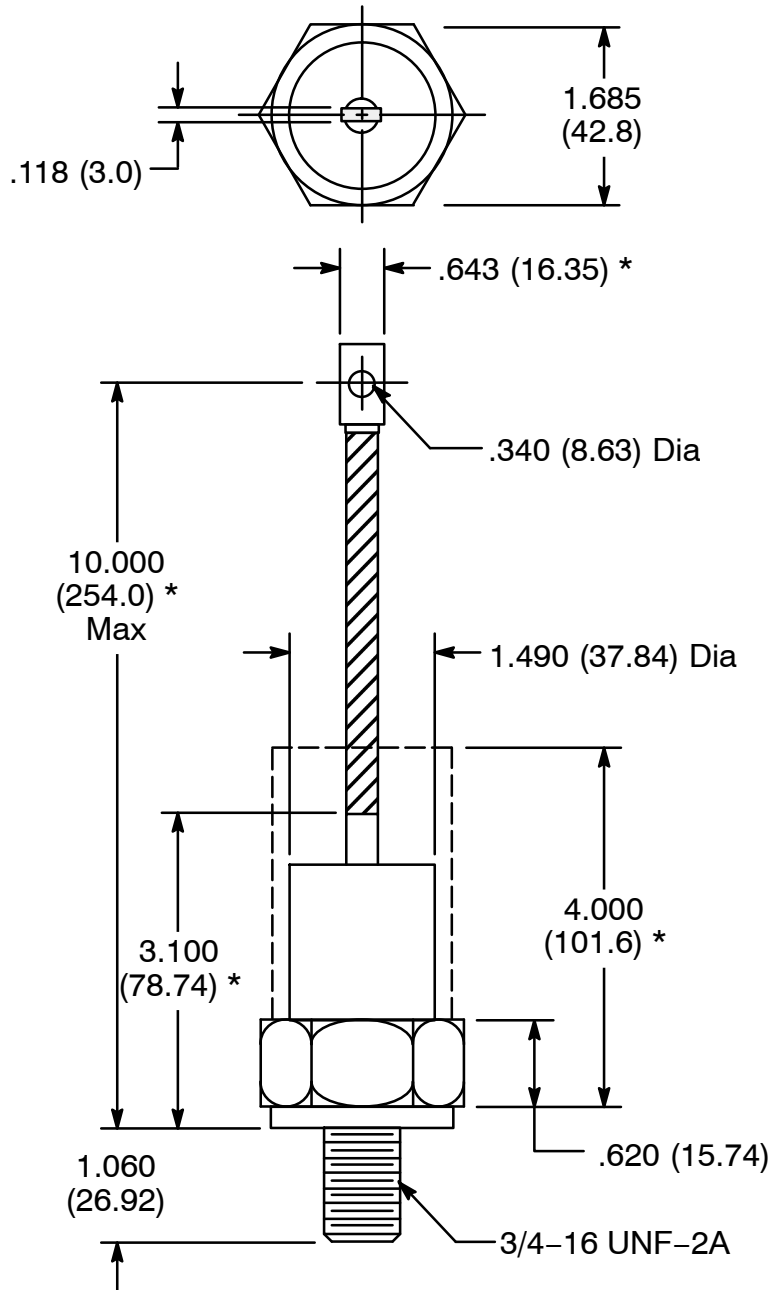
Electrical Characteristics (Cont'd):

Switching

Typical Reverse Recovery Time, t_{rr}
 ($I_{FM} = 1500A$, $t_p = 190\mu s$, $diR/dt = 25A/\mu s$, $T_C = +25^\circ C$) $9\mu s$

Thermal and Mechanical

Operating Junction Temperature Range, T_J -65° to $+200^\circ C$
 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.



* These dimensions are for reference only, please consult the factory for actual size.