



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE5744 3 Phase Bridge Rectifier Module

Description:

The NTE5744 is a powerblock module designed for three-phase full wave rectification and contain six diodes connected in a three-phase bridge configuration. The mounting base of the module is electrically isolated from the semiconductor elements for simple heatsink construction.

Applications:

- Inverters for AC Motors
- Power Supply Units for DC Motors
- DC Power Supply Units for Battery Chargers
- General Purpose DC Power Supply Units

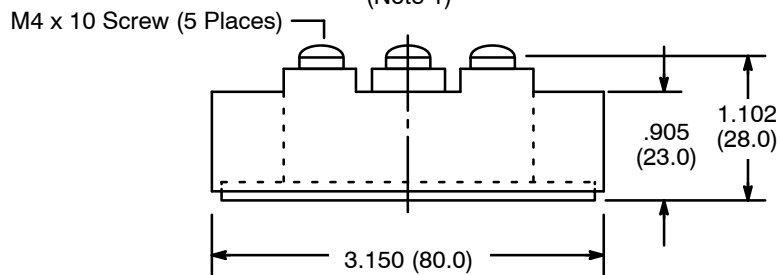
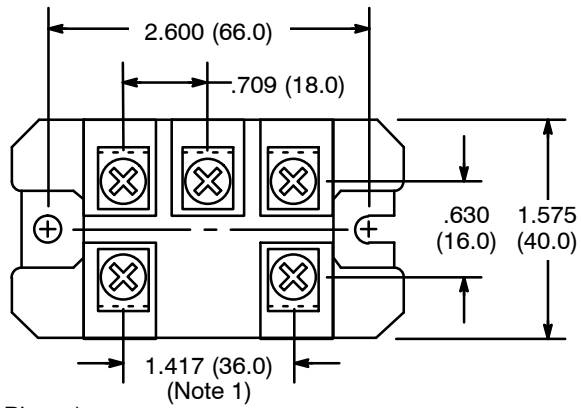
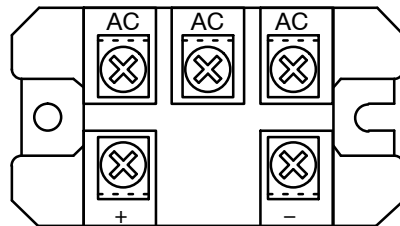
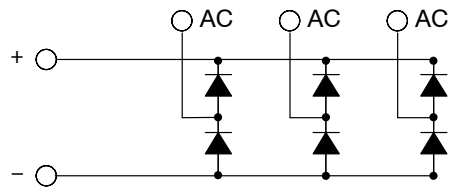
Absolute Maximum Ratings:

Repetitive Peak Reverse Voltage, V_{RRM} 800V
 Non-Repetitive Peak Reverse Voltage, V_{RSM} 880V
 Average Output Current (50/60Hz, Sinewave, $T_C = +103^{\circ}C$), I_D 100A
 Surge Forward Current (Rated Load Conditions), I_{FSM} 1200A
 Maximum I^2t for Fusing (Rated Load Conditions), I^2t 6000A²sec
 Operating Junction Temperature Range, T_J -40° to $+150^{\circ}C$
 Storage Temperature Range, T_{stg} -40° to $+125^{\circ}C$
 Isolation Breakdown Voltage (RMS, Main Terminal to Case, 1sec), V_{ISO} 2500V
 Thermal Resistance, Junction-to-Case, R_{thJC}
 (50/60Hz Sinewave, Thermal Resistance for Total Loss) $0.22^{\circ}C/W$
 Thermal Resistance (With Thermal Compound), R_{thCF} $0.06^{\circ}C/W$

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Repetitive Peak Reverse Current	I_{RRM}	$T_J = +150^{\circ}C, V_{RRM} = 800V$	10	mA
Maximum Forward Voltage Drop	V_{FM}	$T_J = +25^{\circ}C, I_{FM} = 100A$	1.15	V

Circuit Diagram



Note 1. Screws may be closer together at: 1.190 (30.0)