



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

NTE5710 thru NTE5712 NTE5720 thru NTE5722 Powerblock Modules

Description:

NTE series powerblock modules come in an industry standard package, offering four circuits that can be used singly or as power control building blocks. All models feature highly efficient thermal management for greatly extended cycle life.

Features:

- Industry Standard Package and Circuits
- Power Control Building Blocks

Electrical Specifications:

Average Output Current Per Device ($T_C = +85^\circ\text{C}$), $I_{T(AV)}$

NTE5710, NTE5711, NTE5712 55A

NTE5720, NTE5721, NTE5722 90A

Repetitive Peak Reverse Voltage (AC Line), V_{RRM} 1200V (480V)

Maximum Voltage Drop, V_F

NTE5710, NTE5711, NTE5712 ($I_F = 165\text{A}$) 1.4V

NTE5720, NTE5721, NTE5722 ($I_F = 270\text{A}$) 1.4V

Critical Rate of Rise of On-State Current ($T_J = +125^\circ\text{C}$), di/dt 100A/ μs

Critical Rate of Rise of Off-State Voltage ($T_J = +125^\circ\text{C}$), dv/dt 500V/ μs

Maximum Non-Repetitive Surge Current (1/2 Cycle, 60Hz), I_{TSM}

NTE5710, NTE5711, NTE5712 1500A

NTE5720, NTE5721, NTE5722 1950A

Maximum I^2t for Fusing ($t = 8.3\text{ms}$), I^2t

NTE5710, NTE5711, NTE5712 9350A²sec

NTE5720, NTE5721, NTE5722 15800A²sec

Maximum Required Gate Current to Trigger ($+25^\circ\text{C}$), I_{GT} 150mA

Maximum Required Gate Voltage to Trigger ($+25^\circ\text{C}$), V_{GT} 3.0V

Average Gate Power, $P_{G(AV)}$ 500mW

Maximum Peak Gate Voltage (Reverse), V_{GM} 5.0V

Isolation Voltage, V_{ISOL} 2500V_{RMS}

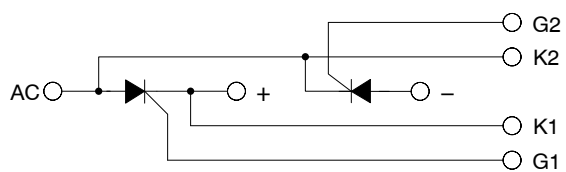
Operating Junction Temperature Range, T_J -40° to $+125^\circ\text{C}$

Maximum Thermal Resistance Per Module, Junction-to-Baseplate, R_{thJC}

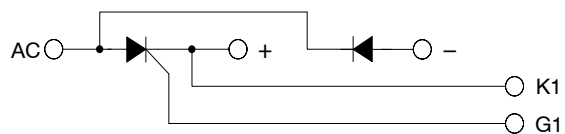
NTE5710, NTE5711, NTE5712 0.25°C/W

NTE5720, NTE5721, NTE5722 0.14°C/W

NTE5710, NTE5720



NTE5711, NTE5721



NTE5712, NTE5722

