



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.

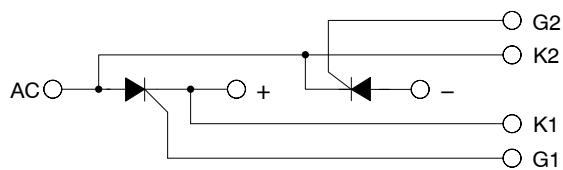
Features:

- Industry Standard Package and Circuits
- Power Control Building Blocks

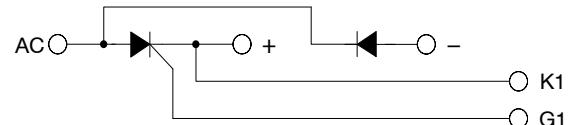
Electrical Specifications:

Average Output Current Per Device ($T_C = +85^\circ\text{C}$), $I_{T(\text{AV})}$	
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	..... 9350A ^2sec
NTE5720, NTE5721, NTE5722	..... 15800A ^2sec
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, $P_{G(\text{AV})}$	..... 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

