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## NTE5710 & NTE5711 NTE5720 & NTE5721 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.

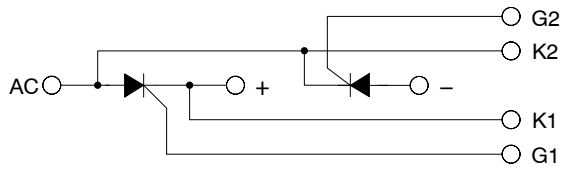
**Features:**

- Industry Standard Package and Circuits
- Power Control Building Blocks

**Electrical Specifications:**

Average Output Current Per Device ( $T_C = +85^\circ\text{C}$ ), $I_{T(AV)}$	
<b>NTE5710, NTE5711</b> .....	55A
<b>NTE5720, NTE5721</b> .....	90A
Repetitive Peak Reverse Voltage (AC Line), $V_{RRM}$ ..... 1200V (480V)	
Maximum Voltage Drop, $V_F$	
<b>NTE5710, NTE5711</b> ( $I_F = 165\text{A}$ ) .....	1.4V
<b>NTE5720, NTE5721</b> ( $I_F = 270\text{A}$ ) .....	1.4V
Critical Rate of Rise of On-State Current ( $T_J = +125^\circ\text{C}$ ), $di/dt$ ..... 100A/ $\mu\text{s}$	
Critical Rate of Rise of Off-State Voltage ( $T_J = +125^\circ\text{C}$ ), $dv/dt$ ..... 500V/ $\mu\text{s}$	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60Hz), $I_{TSM}$	
<b>NTE5710, NTE5711</b> .....	1500A
<b>NTE5720, NTE5721</b> .....	1950A
Maximum $I^2t$ for Fusing ( $t = 8.3\text{ms}$ ), $I^2t$	
<b>NTE5710, NTE5711</b> .....	9350A <sup>2</sup> sec
<b>NTE5720, NTE5721</b> .....	15800A <sup>2</sup> sec
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 <sub>RMS</sub>	
Operating Junction Temperature Range, $T_J$ ..... $-40^\circ$ to $+125^\circ\text{C}$	
Maximum Thermal Resistance Per Module, Junction-to-Baseplate, $R_{thJC}$	
<b>NTE5710, NTE5711</b> .....	0.25 $^\circ\text{C}/\text{W}$
<b>NTE5720, NTE5721</b> .....	0.14 $^\circ\text{C}/\text{W}$

**NTE5710, NTE5720**



**NTE5711, NTE5721**

