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## NTE5708, NTE5714, NTE5724 & NTE6222 Powerblock Modules

**Description:**

NTE series powerblock modules come in a convenient industry standard package with screw terminals, offering 2 different circuits that can be used individually or in combination with other modules. All models feature highly efficient thermal management for greatly extended cycle life.

**Features:**

- Industry Standard Package and Circuits
- Power Control Building Blocks
- Highly Efficient Thermal Management

**Electrical Specifications:** ( $T_C = +25^\circ\text{C}$  unless otherwise specified)

Average Output Current Per Device ( $T_C = +85^\circ\text{C}$ , 8.3ms),  $I_{T(AV)}$

<b>NTE5708</b> .....	25A
<b>NTE5714</b> .....	65A
<b>NTE5724</b> .....	90A
<b>NTE6222</b> .....	60A

Maximum Repetitive Peak Reverse Voltage (AC Line),  $V_{RRM}$  ..... 1600V (600V)

Maximum Voltage Drop,  $V_F$

<b>NTE5708</b> ( $I_F = 75\text{A}$ ) .....	1.55V
<b>NTE5714, NTE5724</b> ( $I_F = 270\text{A}$ ) .....	1.40V
<b>NTE6222</b> ( $I_F = 165\text{A}$ ) .....	1.40V

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,  $I_{TSM}$

<b>NTE5708</b> .....	400A
<b>NTE5714, NTE5724</b> .....	1950A
<b>NTE6222</b> .....	1500A

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

<b>NTE5708</b> .....	670A <sup>2</sup> sec
<b>NTE5714, NTE5724</b> .....	15800A <sup>2</sup> sec
<b>NTE6222</b> .....	9350A <sup>2</sup> sec

Maximum Required Gate Current to Trigger,  $I_{GT}$  ..... 150mA

Maximum Required Gate Voltage to Trigger,  $V_{GT}$  ..... 3.0V

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

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

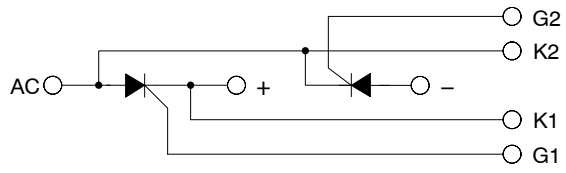
Isolation Voltage (All Terminals to Base),  $V_{ISOL}$  ..... 2500V<sub>RMS</sub>

Operating Junction Temperature Range,  $T_J$  ..... -40° to +125°C

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

<b>NTE5708</b> .....	0.40°C/W
<b>NTE5714, NTE5724</b> .....	0.14°C/W
<b>NTE6222</b> .....	0.25°C/W

**NTE5708, NTE5714, NTE5724**



**NTE6222**

