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## NTE6220 & NTE6230 Powerblock Modules

### Description:

NTE series powerblock modules come in an industry standard package, offering 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 Circuit
- Power Control Building Blocks

### Applications:

- AC/DC Motor Drives
- Various Rectifiers
- DC Supply to PWM Inverter

### Electrical Specifications:

Average Output Current Per Device,  $I_{T(AV)}$

<b>NTE6220</b> ( $T_C = +85^\circ\text{C}$ )	55A
<b>NTE6230</b> ( $T_C = +100^\circ\text{C}$ )	90A

Repetitive Peak Reverse Voltage ( $t_p = 10\text{ms}$ ,  $V_{RSM} = V_{RRM} + 200\text{V}$ ),  $V_{RRM}$  ..... 1200V

Repetitive Peak Current (At  $V_{RRM}$ , **NTE6230 Only**),  $I_{RRM}$  ..... 8mA

Maximum Voltage Drop,  $V_F$

<b>NTE6220</b> ( $I_F = 165\text{A}$ )	1.4V
<b>NTE6230</b> ( $I_F = 270\text{A}$ )	1.33V

Critical Rate of Rise of On-State Current ( $T_J = +125^\circ\text{C}$ , **NTE6220 Only**),  $di/dt$  ..... 100A/ $\mu\text{s}$

Critical Rate of Rise of Off-State Voltage ( $T_J = +125^\circ\text{C}$ , **NTE6220 Only**),  $dv/dt$  ..... 500V/ $\mu\text{s}$

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

<b>NTE6220</b>	1500A
<b>NTE6230</b>	2.30KA

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

<b>NTE6220</b>	9350A <sup>2</sup> sec
<b>NTE6230</b>	26.9A <sup>2</sup> s * 10 <sup>3</sup>

Threshold Voltage ( $T_J = +150^\circ\text{C}$ , **NTE6230 Only**),  $V_{FO}$  ..... 0.8V

Forward Slope Resistance ( $T_J = +150^\circ\text{C}$ , **NTE6230 Only**),  $r_F$  ..... 1.7m $\Omega$

Isolation Voltage,  $V_{ISOL}$  ..... 2500V<sub>RMS</sub>

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

Max. Thermal Resistance Per Module, Junction-to-Baseplate,  $R_{thJC}$

<b>NTE6220</b>	0.25°C/W
<b>NTE6230</b>	0.47°C/W

Max. Thermal Resistance Per Module, Case-to-Heatsink (**NTE6230 Only**),  $R_{thCH}$  ..... 0.2°C/W

NTE6220, NTE6230

