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## NTE6230 Powerblock Module

### **Description:**

The NTE6230 powerblock module comes in an industry standard package, offering a circuit that can be used singly or as a power control building block and features 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 ( $T_C = +100^\circ\text{C}$ ), $I_{T(AV)}$ .....	90A
Repetitive Peak Reverse Voltage ( $t_p = 10\text{ms}$ , $V_{RSM} = V_{RRM} + 200\text{V}$ ), $V_{RRM}$ .....	1200V
Repetitive Peak Current (At $V_{RRM}$ ), $I_{RRM}$ .....	8mA
Maximum Voltage Drop ( $I_F = 270\text{A}$ ), $V_F$ .....	1.33V
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60Hz), $I_{TSM}$ .....	2.30KA
Maximum $I^2t$ for Fusing ( $t = 8.3\text{ms}$ ), $I^2t$ .....	$26.9\text{A}^2\text{s} * 10^3$
Threshold Voltage ( $T_J = +150^\circ\text{C}$ ), $V_{FO}$ .....	0.8V
Forward Slope Resistance ( $T_J = +150^\circ\text{C}$ ), $r_F$ .....	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, $R_{thJC}$ .....	0.47°C/W
Max. Thermal Resistance Per Module, Case-to-Heatsink, $R_{thCH}$ .....	0.2°C/W

Rev. 9-14



