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NTE6234 Powerblock Module

Features:

- Isolated Mounting Base
- Pressure Contact Technology with Increased Power Cycling Capability
- Space and Weight Savings

Applications:

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

Ratings and Characteristics: ($T_J = +150^\circ\text{C}$ unless otherwise specified)

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| Maximum Average Forward Current, $I_{F(AV)}$ ($T_C = +100^\circ\text{C}$, 180° , Half Sine Wave, 50Hz, Single Side Cooled) | 190A |
| Maximum RMS Forward Current, $I_{T(RMS)}$ | 314A |
| Maximum Repetitive Peak Reverse Voltage ($t_p = 10\text{ms}$), V_{RRM} | 1600V |
| Maximum Non-Repetitive Peak Reverse Voltage ($t_p = 10\text{ms}$), V_{RSM} | 2000V |
| Maximum Repetitive Peak Current (At V_{RRM}), I_{RRM} | 12mA |
| Maximum Surge Forward Current (10ms Half Sine Wave, $V_R = 0.6V_{RRM}$), I_{FSM} | 8.0KA |
| Maximum I^2t for Fusing Coordination (10ms half Sine Wave, $V_R = 0.6V_{RRM}$), I^2t | $326\text{A}^2\text{s} * 10^3$ |
| Maximum Threshold Voltage, V_{FO} | 0.75V |
| Maximum Forward Slope resistance, r_F | 0.88m Ω |
| Maximum Peak Forward Voltage ($I_{FM} = 600\text{A}$, $T_J = +25^\circ\text{C}$), V_{FM} | 1.38V |
| RMS Isolation Voltage (50Hz, $t = 1\text{s}$ Min, I_{ISO} : 1mA Max), V_{ISO} | 2500V |
| Storage Temperature Range, T_{stg} | -40° to $+125^\circ\text{C}$ |
| Thermal Resistance, Junction-to-Case (At 180° Sine, Single Side Cooled), R_{thJC} | 0.21 $^\circ\text{C}/\text{W}$ |
| Thermal Resistance, Case-to-Sink (At 180° Sine, Single Side Cooled), R_{thCS} | 0.08 $^\circ\text{C}/\text{W}$ |

Circuit Diagram

