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## NTE6222 Rectifier Powerblock Module

### **Description:**

The NTE6222 rectifier powerblock module comes in a convenient industry standard package with screw terminals and can be used individually or in combination with other modules. This device features highly efficient thermal management for greatly extended cycle life.

### **Features:**

- Industry Standard Package and Circuit
- 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), $I_{T(AV)}$ .....	60A
Maximum Repetitive Peak Reverse Voltage (AC Line), $V_{RRM}$ .....	1600V (600V)
Maximum Voltage Drop ( $I_F = 165\text{A}$ ), $V_F$ .....	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, $I_{TSM}$ .....	1500A
Maximum $I^2t$ for Fusing ( $t = 8.3\text{ms}$ ), $I^2t$ .....	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, $V_{GM}$ .....	-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, $R_{thJC}$ .....	0.25°C/W

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