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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, $I_{T(AV)}$

NTE6220 ($T_C = +85^\circ\text{C}$)	55A
NTE6230 ($T_C = +100^\circ\text{C}$)	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

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

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

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

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

NTE6220	1500A
NTE6230	2.30KA

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

NTE6220	9350A ² sec
NTE6230	26.9A ² s * 10 ³

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 Ω

Isolation Voltage, V_{ISOL} 2500V_{RMS}

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

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

NTE6220	0.25°C/W
NTE6230	0.47°C/W

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

NTE6220, NTE6230

