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## NTE5335 & NTE5338 3-Phase Bridge Rectifier

**Description:**

The NTE5335 and NTE5338 3-Phase bridge rectifiers incorporate highly efficient thermal management to provide high surge capability, extended life, and reliable performance. Available in an industry standard screw-mount package, these devices provide 2500V<sub>rms</sub> from all terminals to the baseplate.

**Features:**

- High Surge Current Rectifier Circuits

**Typical Applications:**

- Inverter
- Inductive Heating
- Chopper

**Electrical Characteristics:**

Repetitive Peak Reverse Voltage ( $T_J = +150^{\circ}\text{C}$ , $t_p = 10\text{ms}$ ), $V_{RRM}$ .....	600V
Maximum DC Output Current ( $T_C = +85^{\circ}\text{C}$ ), $I_O$	
NTE5335 .....	60A
NTE5338 .....	100A
Maximum Repetitive Peak Current (at $V_{RRM}$ , $T_J = +150^{\circ}\text{C}$ ), $I_{RRM}$ .....	8mA
Maximum Surge Forward Current ( $T_J = +25^{\circ}\text{C}$ , Half Sine Wave, 10ms, $V_R = 0.6V_{RRM}$ ), $I_{TSM}$	1.5KA
Maximum $I^2t$ for Fusing ( $T_J = +25^{\circ}\text{C}$ , Half Sine Wave, 10ms, $V_R = 0.6V_{RRM}$ ), $I^2t$ .....	$9.5A^2s \cdot 10^3$
Maximum Threshold Voltage ( $T_J = +150^{\circ}\text{C}$ ), $V_{FO}$ .....	0.8V
Maximum Forward Slope Resistance ( $T_J = +150^{\circ}\text{C}$ ), $r_F$ .....	4.5m $\Omega$
Maximum Peak Forward Voltage ( $T_J = +25^{\circ}\text{C}$ , $I_{FM} = 100$ ), $V_{FM}$ .....	1.3V
Isolation Voltage (50Hz RMS, $t = 1\text{min}$ , $I_{SOL} = 1\text{mA Max}$ ), $V_{ISOL}$ .....	2500V <sub>rms</sub>
Maximum Thermal Resistance (Single Side Cooled), Junction-to-Case, $R_{thJC}$ .....	0.3 $^{\circ}\text{C/W}$
Maximum Thermal Resistance (Single Side Cooled), Case-to-Heat Sink, $R_{thCH}$ .....	0.05 $^{\circ}\text{C/W}$
Storage Temperature Range, $T_{stg}$ .....	-40 $^{\circ}$ to +125 $^{\circ}\text{C}$

