



ELECTRONICS, INC.  
44 FARRAND STREET  
BLOOMFIELD, NJ 07003  
(973) 748-5089  
<http://www.nteinc.com>

## NTE5360 Silicon Controlled Rectifier (SCR) 35 Amp

### **Absolute Maximum Ratings and Electrical Characteristics:**

Repetitive Peak Off State Voltage (Gate Open, $T_J = +110^\circ\text{C}$ ), $V_{DRM}$ .....	600V
Repetitive Peak Reverse Voltage (Gate Open, $T_J = +110^\circ\text{C}$ ), $V_{RRM}$ .....	600V
RMS On-State Current ( $T_C = +80^\circ\text{C}$ , 360° Conduction Angle), $I_{T(RMS)}$ .....	40A
Peak Surge (Non-Repetitive) On-State Current (One Cycle, 50 or 60Hz), $I_{TSM}$ .....	400A
Peak Gate Trigger Current (3 $\mu\text{s}$ Max), $I_{GTM}$ .....	2A
Peak Gate Power ( $I_{GT} \leq I_{GTM}$ ), $P_{GM}$ .....	20W
Average Gate Power Dissipation, $P_{G(AV)}$ .....	500mW
Maximum Repetitive Peak Off-State Current (At $V_{DRM}$ , $T_C = +110^\circ\text{C}$ ), $I_{DRM}$ .....	1.0mA
Maximum Repetitive Peak Reverse Current (At $V_{RRM}$ , $T_C = +110^\circ\text{C}$ ), $I_{RRM}$ .....	1.0mA
Maximum Peak On-State Voltage ( $T_C = +25^\circ\text{C}$ , $I_T = 40\text{A}$ ), $V_{TM}$ .....	1.6V
Maximum DC Holding Current (Gate Open, $T_C = +25^\circ\text{C}$ ), $I_H$ .....	50mA
Critical Rate of Rise of Off-State Voltage (Gate Open, $T_C = +110^\circ\text{C}$ ), $dv/dt$ .....	200V/ $\mu\text{s}$
Maximum DC Gate Trigger Current ( $V_A = 12\text{V}$ , $R_L = 60\Omega$ , $T_C = +25^\circ\text{C}$ ), $I_{GT}$ .....	25mA
Maximum DC Gate Trigger Voltage ( $V_A = 12\text{V}$ , $R_L = 60\Omega$ , $T_C = +25^\circ\text{C}$ ), $V_{GT}$ .....	2.0V
gate Controlled Turn-On Time (For $t_d$ and $t_r$ , $I_{GT} = 150\text{mA}$ , $T_C = +25^\circ\text{C}$ ), $t_{gt}$ .....	2.5 $\mu\text{s}$
Operating Temperature Range, $T_{opr}$ .....	-40° to +150°C
Storage Temperature Range, $T_{stg}$ .....	-40° to +150°C
Typical Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	1.4°C/W

