



ELECTRONICS, INC.

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

NTE5575, NTE5577, NTE5579 Silicon Controlled Rectifier (SCR) 125 Amp

Electrical Characteristics:

Repetitive Peak Forward Blocking Voltage, V_{DRM}	
NTE5575	200V
NTE5577	600V
NTE5579	1200V
Repetitive Peak Reverse Voltage, V_{RRM}	
NTE5575	200V
NTE5577	600V
NTE5579	1200V
Non-Repetitive Transient Peak Reverse Voltage, V_{RSM}	
NTE5575	300V
NTE5577	700V
NTE5579	1300V
Maximum RMS On-State Current, $I_{T(RMS)}$	125A
Maximum Average On-State Current (+180° Conduction, $T_C = +80^\circ\text{C}$), $I_{T(AV)}$	70A
Maximum Peak One-Cycle, Non-Repetitive Surge Current, I_{TSM}	
50Hz	1400A
60Hz	1500A
Maximum I^2t for Fusing (1.5ms), I^2t	7000A ² sec
Peak On-State Voltage ($T_C = +25^\circ\text{C}$, +180° Conduction, Rated $I_{T(AV)}$), V_{TM}	2V
Maximum Thermal Resistance, DC, Junction to Case, $R_{\theta JC}$	0.3°C/W
Typical Turn-Off Time ($T_J = +125^\circ\text{C}$), t_q	100μs
Rate-of-Rise of Turned-On Current, di/dt	200A/μs
Operating Junction Temperature Range, T_J	-40° to +125°C
Maximum Critical Rate-of-Rise of Off-State Voltage, dv/dt (Exponential @ $T_J = +125^\circ\text{C}$)	200V/μs
Maximum Required Gate Trigger Current, I_{GT}	
$T_J = -40^\circ\text{C}$	200mA
$T_J = -25^\circ\text{C}$	125mA
Maximum Required Gate Trigger Voltage ($T_J = +25^\circ\text{C}$), V_{GT}	200mV
Maximum Forward Voltage Drop ($I_{TM} = 500\text{A}$, $T_J = +25^\circ\text{C}$), V_F	1.8V

