



ELECTRONICS, INC.
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NTE5575, NTE5577, NTE5579
Silicon Controlled Rectifier (SCR)
125 Amp, TO83

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, $T_C = +80^\circ C$), $I_{T(AV)}$	
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 ($T_C = +25^\circ C$, +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 ($T_J = +125^\circ C$), 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 @ $T_J = +125^\circ C$)	
200V/µs	
Maximum Required Gate Trigger Current, I_{GT}	
$T_J = -40^\circ C$	200mA
$T_J = -25^\circ C$	125mA
Maximum Required Gate Trigger Voltage ($T_J = +25^\circ C$), V_{GT}	
200mV	
Maximum Forward Voltage Drop ($I_{TM} = 500A$, $T_J = +25^\circ C$), V_F	
1.8V	

