

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

Electrical Characteristics:

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| 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} | 200mA |
| Maximum Forward Voltage Drop ($I_{TM} = 500A$, $T_J = +25^\circ\text{C}$), V_F | 1.8V |

