



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

NTE5452 thru NTE5458 Silicon Controlled Rectifier (SCR) 4 Amp Sensitive Gate, TO202

Description:

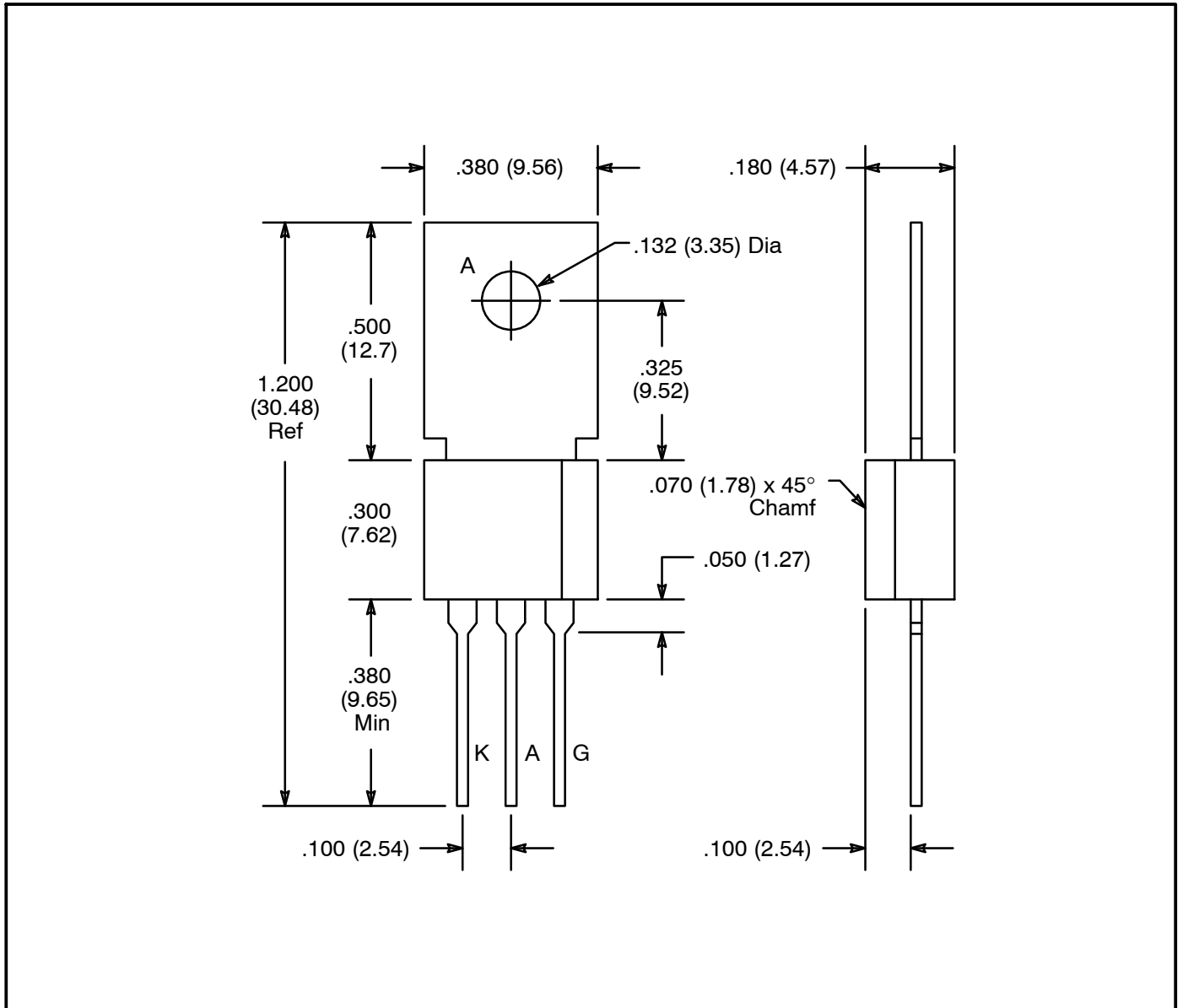
The NTE5452 through NTE5458 are sensitive gate 4 Amp SCR's in a TO202 type package designed to be driven directly with IC and MOS devices. These reverse-blocking triode thyristors may be switched from off-state to conduction by a current pulse applied to the gate terminal. They are designed for control applications in lighting, heating, cooling, and static switching relays.

Absolute Maximum Ratings:

| | |
|---|------|
| Repetitive Peak Reverse Voltage ($T_C = +100^\circ\text{C}$), V_{RRM} | |
| NTE5452 | 30V |
| NTE5453 | 50V |
| NTE5454 | 100V |
| NTE5455 | 200V |
| NTE5456 | 300V |
| NTE5457 | 400V |
| NTE5458 | 600V |
| Repetitive Peak Off-State Voltage ($T_C = +100^\circ\text{C}$), V_{DRXM} | |
| NTE5452 | 30V |
| NTE5453 | 50V |
| NTE5454 | 100V |
| NTE5455 | 200V |
| NTE5456 | 300V |
| NTE5457 | 400V |
| NTE5458 | 600V |
| RMS On-State Current, $I_{T(RMS)}$ | |
| 4A | |
| Peak Surge (Non-Repetitive) On-State Current (One Cycle at 50 or 60Hz), I_{TSM} | |
| 20A | |
| Peak Gate-Trigger Current (3 μ s Max), I_{GTM} | |
| 1A | |
| Peak Gate-Power Dissipation ($I_{GT} \leq I_{GTM}$ for 3 μ s Max), P_{GM} | |
| 20W | |
| Average Gate Power Dissipation, $P_{G(AV)}$ | |
| 200mW | |
| Operating Temperature Range, T_{opr} | |
| -40° to +100°C | |
| Storage Temperature Range, T_{stg} | |
| -40° to +150°C | |
| Typical Thermal Resistance, Junction-to-Case, R_{thJC} | |
| +5°C/W | |

Electrical Characteristics:

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--|--------------------|--|-----|-----|-----|------------------------|
| Peak Off-State Current | I_{RRM} | $V_{RRM} = \text{Max}, V_{DRXM} = \text{Max}, T_C = +100^\circ\text{C}, R_{G-K} = 1\text{k}\Omega$ | - | - | 100 | μA |
| | I_{DRXM} | | - | - | 100 | μA |
| Maximum On-State Voltage | V_{TM} | $T_C = +25^\circ\text{C}, I_T = 4\text{A (Peak)}$ | - | - | 2.2 | V |
| DC Holding Current | I_{HOLD} | $T_C = +25^\circ\text{C}$ | - | - | 3 | mA |
| DC Gate-Trigger Current | I_{GT} | $V_D = 6\text{VDC}, R_L = 100\Omega, T_C = +25^\circ\text{C}$ | - | 50 | 200 | μA |
| DC Gate-Trigger Voltage | V_{GT} | $V_D = 6\text{VDC}, R_L = 100\Omega, T_C = +25^\circ\text{C}$ | - | - | 0.8 | V |
| Total Gate Controlled Turn-On Time | t_{gt} | $T_C = +25^\circ\text{C}$ | - | 1.2 | - | μs |
| I^2t for Fusing Reference | I^2t | $> 1.5\text{msoc}$ | - | - | 0.5 | A^2sec |
| Critical rate of Applied Forward Voltage | dv/dt (critical) | $R_{G-K} = 1\text{k}\Omega, T_C = +100^\circ\text{C}$ | - | 8 | - | $\text{V}/\mu\text{s}$ |



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [SCRs](#) category:

Click to view products by [NTE](#) manufacturer:

Other Similar products are found below :

[NTE5428](#) [NTE5448](#) [NTE5457](#) [NTE5511](#) [T1500N16TOF VT](#) [T720N18TOF](#) [T880N14TOF](#) [T880N16TOF](#) [TS110-7UF](#) [TT104N12KOF-A](#)
[TT104N12KOF-K](#) [TT162N16KOF-A](#) [TT162N16KOF-K](#) [TT330N16AOF](#) [VS-16RIA100](#) [VS-22RIA20](#) [VS-2N5206](#) [VS-2N685](#) [VS-](#)
[40TPS08A-M3](#) [VS-ST230S12P1VPBF](#) [057219R](#) [CLB30I1200HB](#) [T1190N16TOF VT](#) [T1220N22TOF VT](#) [T201N70TOH](#) [T830N18TOF](#)
[TD92N16KOF-A](#) [TT250N12KOF-K](#) [VS-2N692](#) [VS-2N689](#) [VS-25RIA40](#) [VS-16RIA120](#) [VS-10RIA120](#) [VS-30TPS08PBF](#) [NTE5427](#)
[NTE5442](#) [VS-2N690](#) [VS-ST300S20P0PBF](#) [TT251N16KOF-K](#) [VS-22RIA100](#) [VS-16RIA40](#) [CR02AM-8#F00](#) [VS-ST110S12P0VPBF](#)
[TD250N16KOF-A](#) [VS-ST110S16P0](#) [VS-10RIA10](#) [VS-16TTS08-M3](#) [TS110-7A1-AP](#) [T930N36TOF VT](#) [T2160N24TOF VT](#)