



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

NTE5500 thru NTE5509 Silicon Controlled Rectifier (SCR) 16 Amp, TO48

Description:

The NTE5500 thru NTE5509 series of industrial-type silicon controlled rectifiers (SCR) are available in a TO48 style package with a current handling capability to 25 Amps at junction temperatures to +125°C.

Absolute Maximum Ratings: ($T_J = +125^\circ\text{C}$ unless otherwise specified)

Peak Forward Blocking Voltage, V_{DRM}

NTE5500	25V
NTE5501	50V
NTE5502	100V
NTE5503	150V
NTE5504	200V
NTE5505	250V
NTE5506	300V
NTE5507	400V
NTE5508	500V
NTE5509	600V

Peak Reverse Blocking Voltage (Note1, Note2), $V_{RSM(rep)}$

NTE5500	25V
NTE5501	50V
NTE5502	100V
NTE5503	150V
NTE5504	200V
NTE5505	250V
NTE5506	300V
NTE5507	400V
NTE5508	500V
NTE5509	600V

Peak Reverse Blocking Voltage (Transient, Non-Recurrent, $t = 5\text{ms Max}$, Note2), $V_{RSM(non-rep)}$

NTE5500	35V
NTE5501	75V
NTE5502	150V
NTE5503	225V
NTE5504	300V
NTE5505	350V
NTE5506	400V
NTE5507	500V
NTE5508	600V
NTE5509	700V

Forward Current RMS (All Conduction Angles), I_T 25A

Peak Forward Surge Current (One Cycle, 60Hz, $T_J = -65^\circ$ to $+125^\circ\text{C}$), I_{TSM} 200A

Circuit Fusing Considerations ($T_J = -65^\circ$ to $+125^\circ\text{C}$, $t \leq 8.3\text{ms}$), I^2t 165A²s

Note 1. V_{RSM} can be applied on a continuous DC basis without incurring change.

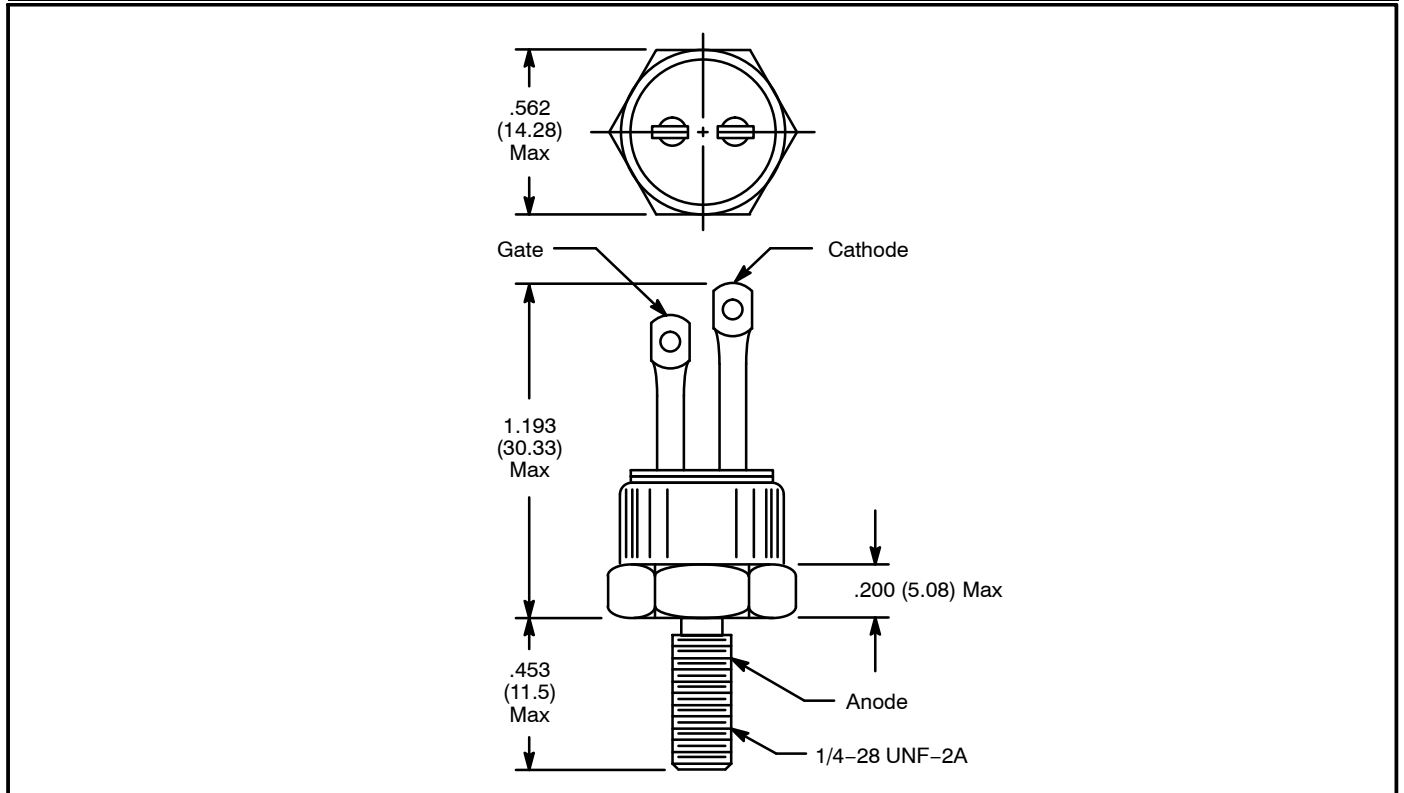
Note 2. $V_{RSM(rep)}$ ratings apply for zero or negative gate voltage.

Absolute Maximum Ratings (Cont'd): ($T_J = +125^\circ\text{C}$ unless otherwise specified)

Peak Gate Power – Forward, P_{GM}	5W
Average Gate Power – Forward, $P_{G(AV)}$	500mW
Peak Gate Current – Forward, I_{GM}	2A
Peak Gate Voltage – Forward, V_{GFM}	10V
Peak Gate Voltage – Reverse, V_{GRM}	5V
Operating Junction Temperature Range, T_J	-65° to $+125^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+150^\circ\text{C}$
Stud Torque	30 in. lb. (3.33 m•N)

Electrical Characteristics: ($T_C = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Peak Forward or Reverse Blocking Current NTE5500 thru NTE5506	I_{DRM}, I_{RRM}	$T_J = +125^\circ\text{C}$	-	-	10	mA
NTE5507			-	-	8	mA
NTE5508			-	-	6	mA
NTE5509			-	-	4	mA
Gate Triggs Current (Continuous DC)	I_{GT}	Anode Voltage = 7V, $R_L = 50\Omega$	-	10	25	mA
Gate Trigger Voltage (Continuous DC)	V_{GT}	Anode Voltage = 7V, $R_L = 50\Omega$	0.25	-	3.0	V
Holding Current	I_{HOLD}	Anode Voltage = 7V, Gate Open	-	20	-	mA
Forward ON Voltage	V_{TM}	$I_T = 20\text{A}$	-	1.1	1.5	V
Turn-On Time	t_{gt}	$I_T = 10\text{A}, I_G = 100\text{mA}$	-	1.0	-	μs
Turn-Off Time	t_q	$T_J = +125^\circ\text{C}, I_T = 10\text{A}, I_R = 10\text{A},$ $dv/dt = 30\text{V}/\mu\text{s}$ Min, $V_{DRM} = \text{Rated Voltage}$	-	30	-	μs
Forward Voltage Application Rate	dv/dt	$T_J = +125^\circ\text{C}, \text{Gate Open}$	-	30	-	$\text{V}/\mu\text{s}$
Thermal Resistance, Junction to Case	$R_{\theta JC}$		-	1.0	2.0	$^\circ\text{C}/\text{W}$



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](#) [TN1205H-6G](#) [TN1215-800B-TR](#)
[TS110-7UF](#) [TT104N12KOF-A](#) [TT104N12KOF-K](#) [TT162N16KOF-A](#) [TT162N16KOF-K](#) [TT330N16AOF](#) [VS-111RKI120PBF](#) [VS-16RIA100](#)
[VS-22RIA20](#) [VS-2N5206](#) [VS-2N685](#) [VS-40TPS08A-M3](#) [VS-50RIA10](#) [057219R](#) [T1190N16TOF VT](#) [T1220N22TOF VT](#) [T201N70TOH](#)
[T830N14TOF](#) [T830N18TOF](#) [TD92N16KOF-A](#) [TT250N12KOF-K](#) [VS-ST180S12P0V](#) [VS-25RIA40](#) [VS-16RIA120](#) [VS-30TPS08PBF](#)
[TN1215-800G-TR](#) [NTE5427](#) [NTE5442](#) [X0405NF 1AA2](#) [VS-ST300S20P0PBF](#) [T2160N28TOF VT](#) [TT251N16KOF-K](#) [VS-22RIA100](#) [VS-](#)
[16RIA40](#) [CR02AM-8#F00](#) [VS-ST110S12P0VPBF](#) [TD250N16KOF-A](#) [GA301A](#) [VS-ST110S16P0](#) [VS-10RIA10](#)