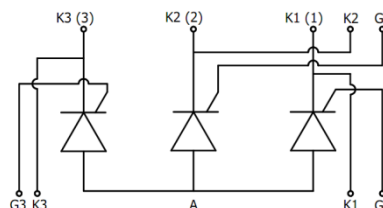


Non-isolated Thyristor Module, 200 Amps

Features

- Low voltage three-phase
- High surge current capability
- Easy construction
- Non-isolated
- Mounting base as common anode



Voltage Ratings ($T_C = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	N3T200A30	N3T200A40	Units
Maximum repetitive peak reverse voltage	V_{RRM}	300	400	V
Maximum non-repetitive peak reverse voltage	V_{RSM}	360	480	V
Maximum repetitive peak off-state voltage	V_{DRM}	300	400	V

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

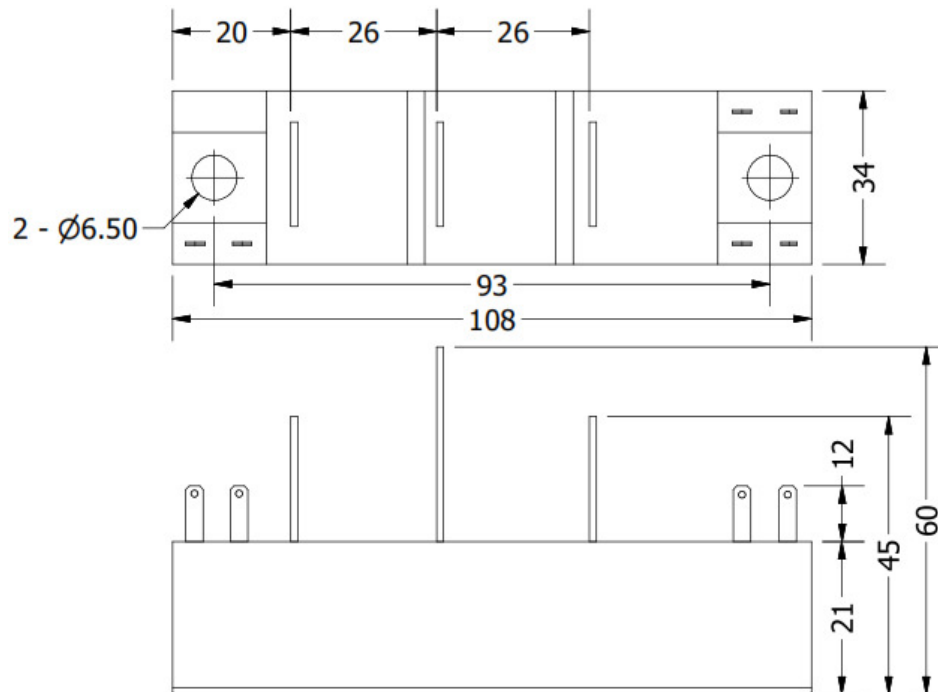
Parameter	Conditions	Symbol	Values	Units
Average on-state current	Single phase, half-wave, 180° conduction	$I_{T(AV)}$	200	A
R.M.S. on-state current		$I_{T(RMS)}$	315	A
On-state surge current	half cycle, 50Hz, peak value, non-repetitive	I_{TSM}	5400	A
I^2t required for fusing		I^2t	145800	A^2S
Peak gate current		I_{GM}	3	A
Peak gate voltage (forward)		V_{FGM}	10	V
Peak gate voltage (reverse)		V_{RGM}	5	V
Critical rate of rise of on-state current	$I_G = 200\text{mA}$, $T_J = 25^\circ\text{C}$	di/dt	50	$\text{A}/\mu\text{s}$
Critical rate of rise of off-state voltage	$T_J = 150^\circ\text{C}$	dv/dt	200	$\text{V}/\mu\text{s}$
Holding current	$T_J = 25^\circ\text{C}$	I_H	70	mA
Peak on-state voltage	$T_J = 25^\circ\text{C}$	V_{TM}	1.20	V
Repetitive Peak Reverse Current	$T_J = 150^\circ\text{C}$, single phase, half wave	I_{RRM}	60	mA
Gate Trigger Current	$T_J = 25^\circ\text{C}$, $I_T = 1\text{A}$	I_{GT}	150	mA
Gate Trigger Voltage	$T_J = 25^\circ\text{C}$, $I_T = 1\text{A}$	V_{GT}	2	V

Thermal & Mechanical Specifications ($T_C = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Values	Units
Operating junction temperature range	T_J	-40 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-40 to +125	$^\circ\text{C}$
Thermal resistance, junction to case	$R_{th(j-c)}$	0.12	$^\circ\text{C}/\text{W}$
Weight	W	200	g

Package Outline

(All dimensions in mm)



Ordering Table

<i>N3T</i>	<i>200</i>	<i>A</i>	<i>40</i>
1	2		3

- 1 – Half-bridge Thyristor Module
- 2 - Current Rating = $I_{T(AV)}$
- 3 – Voltage = V_{RRM} (Voltage Ratings Table)