Non-isolated Thyristor Module

Features

- Low voltage three-phase
- High surge current of 2500A @ 60Hz
- Easy construction
- Non-isolated
- Mounting base as common anode

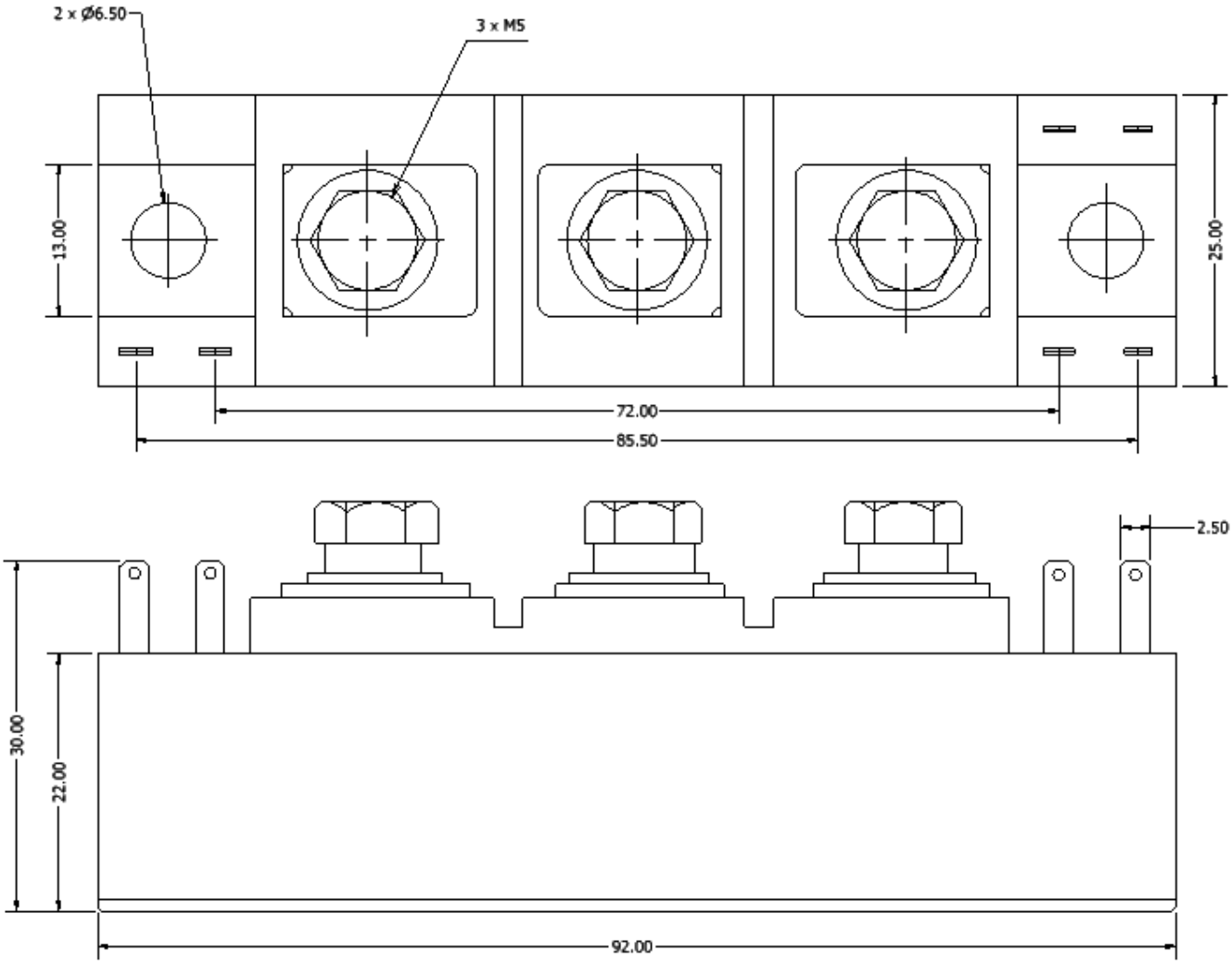
NT3

Voltage Ratings (T_C = 25^{O}C unless otherwise specified)			
Parameter	**Symbol**	**Values**	**Units**
Maximum repetitive peak reverse voltage	V_{RRM}	300	V
Maximum non-repetitive peak reverse voltage	V_{RSM}	360	V
Maximum repetitive peak off-state voltage	V_{DRM}	300	V

Electrical Characteristics (T_C = 25^{O}C unless otherwise specified)				
Parameter	**Conditions**	**Symbol**	**Values**	**Units**
Average on-state current	Single phase, half-wave, 180^0 conduction @ T_C = 116^{0}C	$I_{T(AV)}$	80	A
R.M.S. on-state current		$I_{T(RMS)}$	125	A
On-state surge current	half cycle, 50Hz/60Hz, peak value, non-repetitive	I_{TSM}	2280	A
I^2t required for fusing		I^2t	26000	A^2S
Peak gate power dissipation		P_{GM}	10	W
Average gate power dissipation		$P_{GM(AV)}$	1	W
Peak gate current		I_{GM}	3	A
Peak gate voltage (forward)		VFGM	10	V
Peak gate voltage (reverse)		VRGM	5	V
Critical rate of rise of on-state current	I_0 = 200mA, V_0 = ½ V_{DRM}, dI_G/dt = 1 A/µs	di/dt	50	A/µs
Critical rate of rise of off-state voltage	T_J = 150^{0}C, V_0 = $^{2/3}$ V_{DRM}, exponential wave	dv/dt	50	V/µs
Holding current		I_H	100	mA

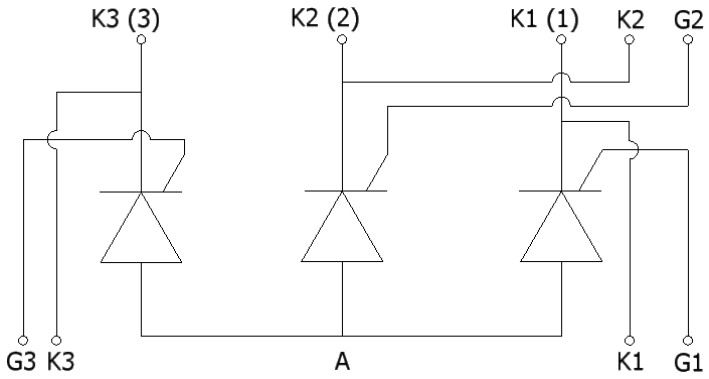
Thermal & Mechanical Specifications (T_C = 25^{O}C unless otherwise specified)			
Parameter	**Symbol**	**Values**	**Units**
Operating junction temperature range	T_J	-30 to +150	^{0}C
Storage temperature range	T_{STG}	-30 to +125	^{0}C
Thermal resistance, junction to case	$R_{th(JC)}$	0.35	^{0}C/W

D-95, Sector 63, Noida – 201301, India • Tel: 0120-4205450 • Fax: 0120-4273653
sales@nainasemi.com • www.nainasemi.com



ALL DIMENSIONS IN MM

Diode Configuration



D-95, Sector 63, Noida – 201301, India • Tel: 0120-4205450 • Fax: 0120-4273653
sales@nainasemi.com • www.nainasemi.com