

Non-isolated Thyristor Module

Features

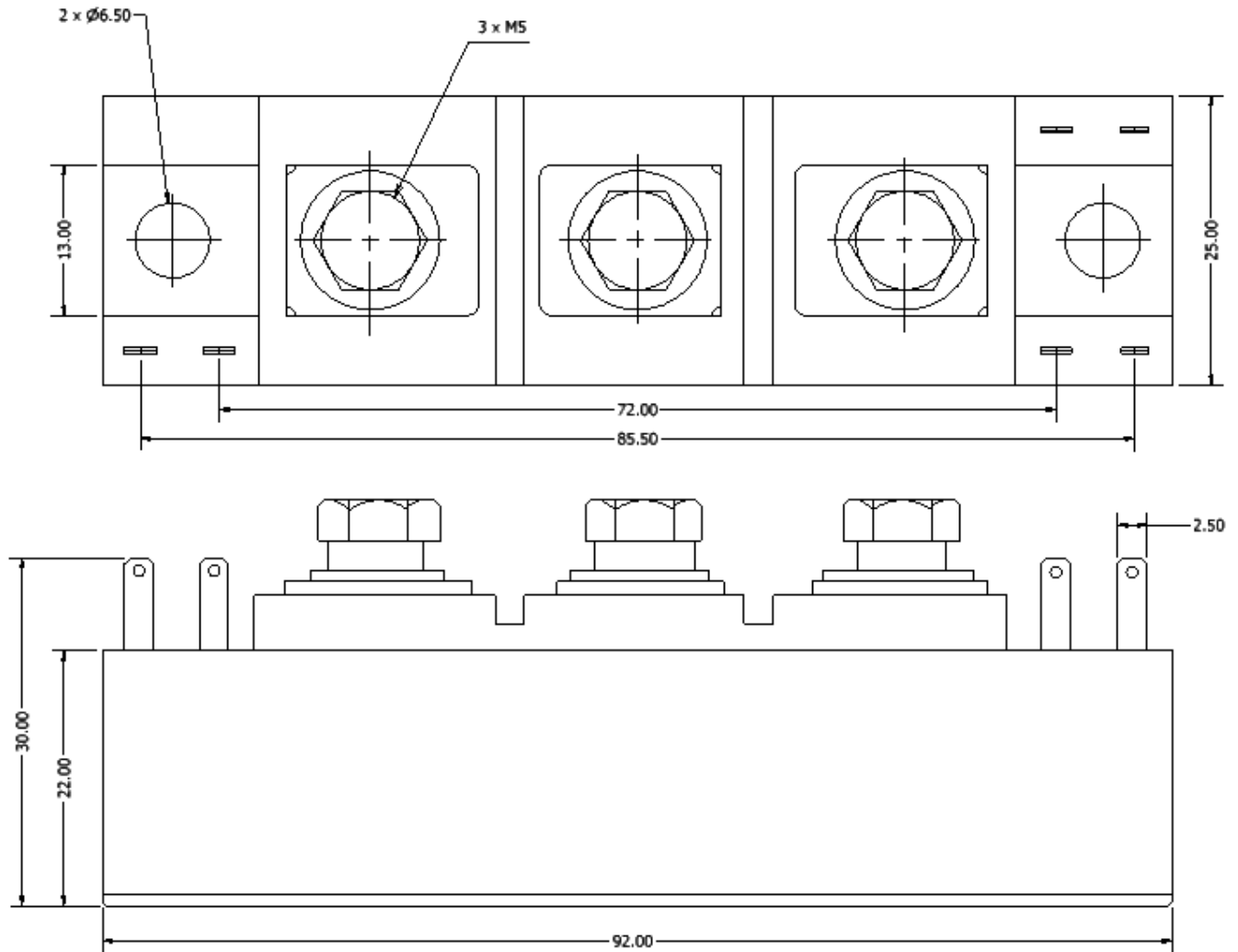
- Low voltage three-phase
- High surge current of 2500A @ 60Hz
- Easy construction
- Non-isolated
- Mounting base as common anode

Voltage Ratings ($T_C = 25^\circ\text{C}$ 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


NT3

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 @ $T_C = 116^\circ\text{C}$	$I_{T(AV)}$	130	A
R.M.S. on-state current		$I_{T(RMS)}$	204	A
On-state surge current	half cycle, 50Hz/60Hz, peak value, non-repetitive	I_{TSM}	3300	A
I^2t required for fusing		I^2t	51500	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	$I_0 = 200\text{mA}$, $V_0 = \frac{1}{2} V_{DRM}$, $di_G/dt = 1 \text{ A}/\mu\text{s}$	di/dt	50	$\text{A}/\mu\text{s}$
Critical rate of rise of off-state voltage	$T_J = 150^\circ\text{C}$, $V_0 = \frac{2}{3} V_{DRM}$, exponential wave	dv/dt	50	$\text{V}/\mu\text{s}$
Holding current		I_H	70	mA

Thermal & Mechanical Specifications ($T_C = 25^\circ\text{C}$ unless otherwise specified)			
Parameter	Symbol	Values	Units
Operating junction temperature range	T_J	-30 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-30 to +125	$^\circ\text{C}$
Thermal resistance, junction to case	$R_{th(JC)}$	0.25	$^\circ\text{C}/\text{W}$



ALL DIMENSIONS IN MM

Diode Configuration

