

## 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



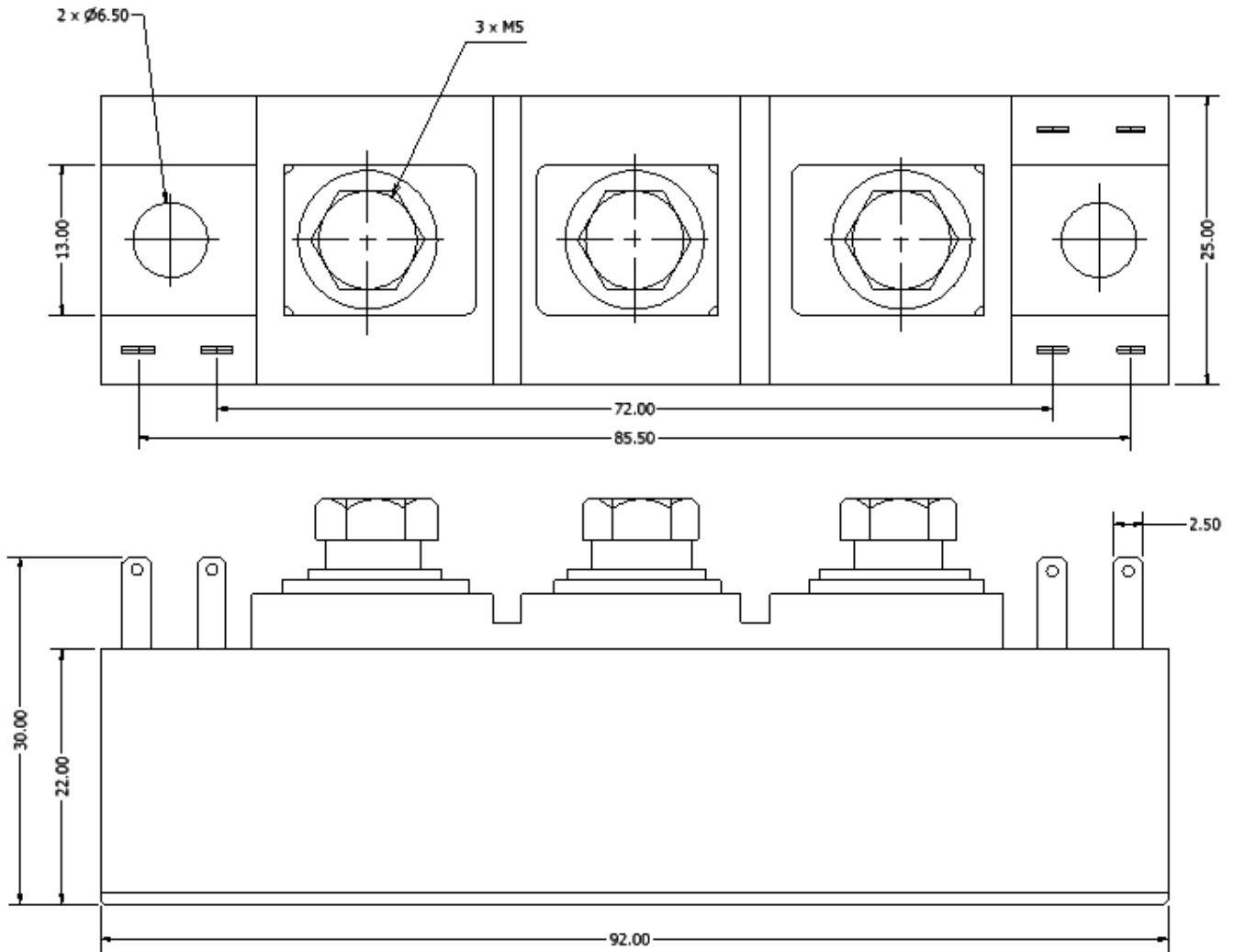
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### Electrical Characteristics ( $T_C = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Values	Units
Average on-state current	Single phase, half-wave, 180° conduction @ $T_C = 116^{\circ}\text{C}$	$I_{T(AV)}$	60	A
R.M.S. on-state current		$I_{T(RMS)}$	94	A
On-state surge current	half cycle, 50Hz/60Hz, peak value, non-repetitive	$I_{TSM}$	1900	A
$I^2t$ required for fusing		$I^2t$	14000	$\text{A}^2\text{S}$
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		$I_H$	100	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	$R_{th(JC)}$	0.35	$^{\circ}\text{C}/\text{W}$



ALL DIMENSIONS IN MM

**Diode Configuration**

