

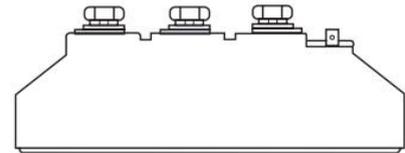
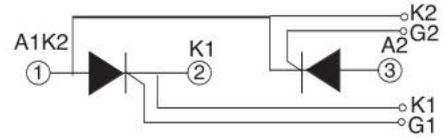
Thyristor Modules

FEATURES

- The chip is electrically insulated from the base plate
- Small in size and light in weight
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- AC/DC motor control
- Frequency converter



ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{RRM}	Repetitive Peak Reverse Voltage		1800	V
V_{DRM}	Repetitive Peak Forward Blocking Voltage		1800	V
$I_{T(AV)}$	Average Forward Current	Sinewave, 180° conduction, $T_c=85^\circ\text{C}$	140	A
I_{TSM}	Peak, One-cycle, Non-repetitive Surge Current	8.3 ms (60Hz), sine	2.59	KA
V_{iso}	Isolated Voltage		2500	V
T_J	Junction Temperature		-40~125	$^\circ\text{C}$
T_{stg}	Storage Temperature Range		-40~125	$^\circ\text{C}$

THERMAL CHARACTERISTICS

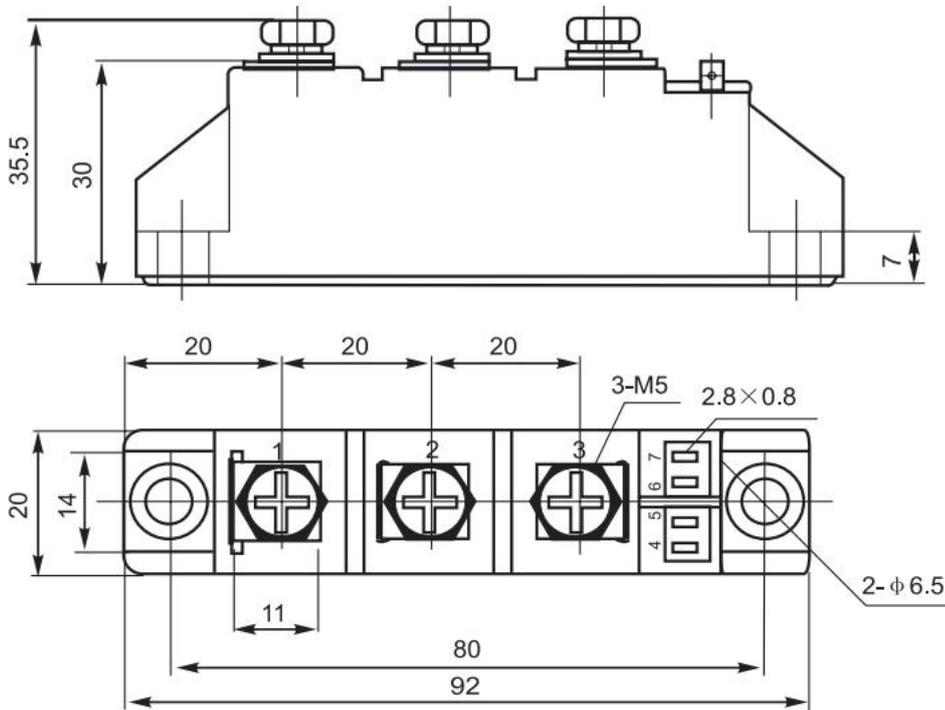
SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case, Per Module	0.25	$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{TM}	Forward Voltage Drop	$I_{TM} = 420\text{ A}, T_J = 25\text{ }^\circ\text{C}$		1.69	V
I_{DRM} I_{RRM}	Peak Reverse and Off-state Leakage Current	$V_D = V_{DRM}$ $V_R = V_{RRM}, T_J = 125\text{ }^\circ\text{C}$		12	mA
I_{GT}	DC gate current required to trigger	$V_D = 12\text{ V}, T_J = 25\text{ }^\circ\text{C}$	30	100	mA
V_{GT}	DC gate voltage required to trigger		1.0	2.5	V

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



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