



Thyristor Module

Features

- Half-bridge SCR configuration integrated in a single package
- High-thermal-conductivity DBC insulation for excellent heat dissipation
- Vacuum soldering technology for enhanced reliability

Product Summary

Parameter	Value	Unit
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Applications

- Heating control
- Light control system
- DC motor

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

Parameter	Conditions	Symbol	Values	Unit
Repetitive peak off-state voltage	$T_{vj} = 25^\circ\text{C}$	V_{DRM}	1600	V
Repetitive peak reverse voltage	$T_{vj} = 25^\circ\text{C}$	V_{RRM}	1600	V
Non-repetitive peak off-state voltage	$T_{vj} = 25^\circ\text{C}$	V_{DSM}	1700	V
Non-repetitive peak reverse voltage	$T_{vj} = 25^\circ\text{C}$	V_{RSM}	1700	V
Average forward current	$T_C = 85^\circ\text{C}$	$I_{T(AV)}$	250	A
Forward surge current	1/2 cycle, Sine wave, 50Hz $T_{vj} = 25^\circ\text{C}$	I_{TSM}	8300	A
I^2t value for fusing		I^2t	344400	A^2s
Critical rate of rise of on-state current	$I_G = 2 \times I_{GT}$	di/dt	150	A/s
RMS isolation voltage	A.C 50Hz(1s/1min)	V_{ISO}	3600/3000	V
Junction temperature range		T_J	-40 ~ +125	-
Storage temperature range		T_{stg}	-40 ~ +125	-

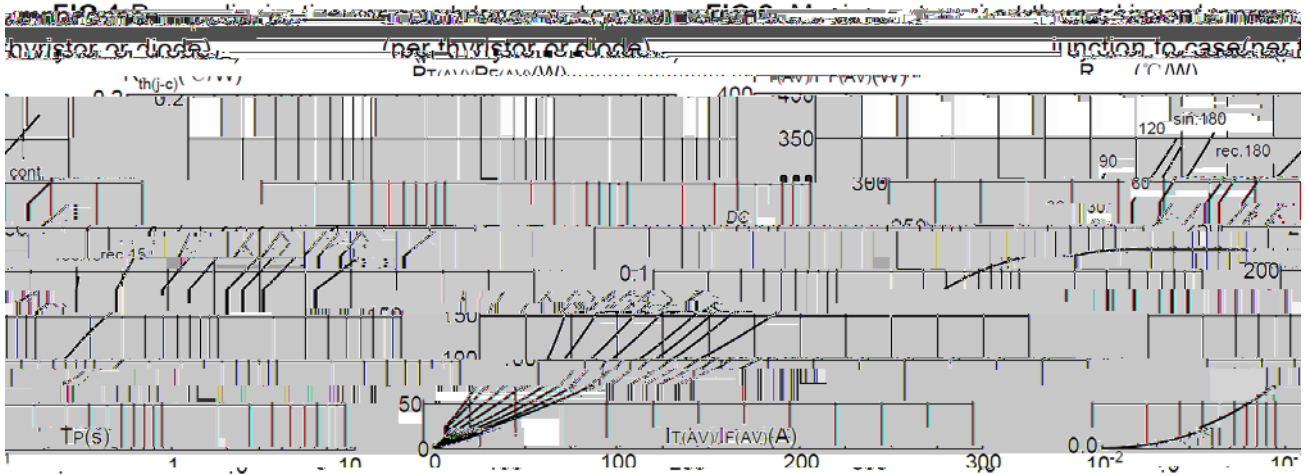
Electrical Characteristics (@ $T_C = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Peak forward voltage	$I_T=750\text{A}$, $t_P=380$ V	V_T				

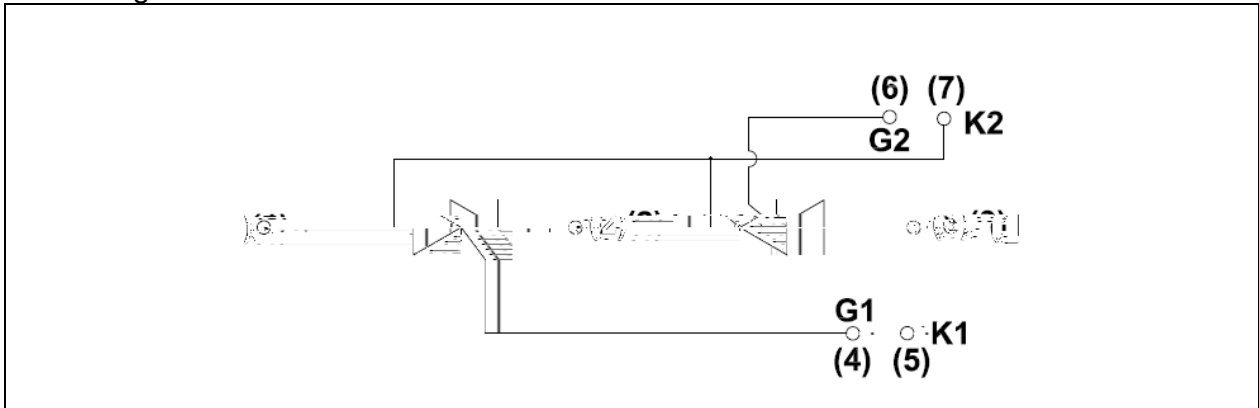
Ordering Information

Device	Marking	Package	Weight	Inner Box	Pre Carton
JMT250KT16T2	JMT250KT16T2	T2	170±10g/PCS	6 PCS	72 PCS

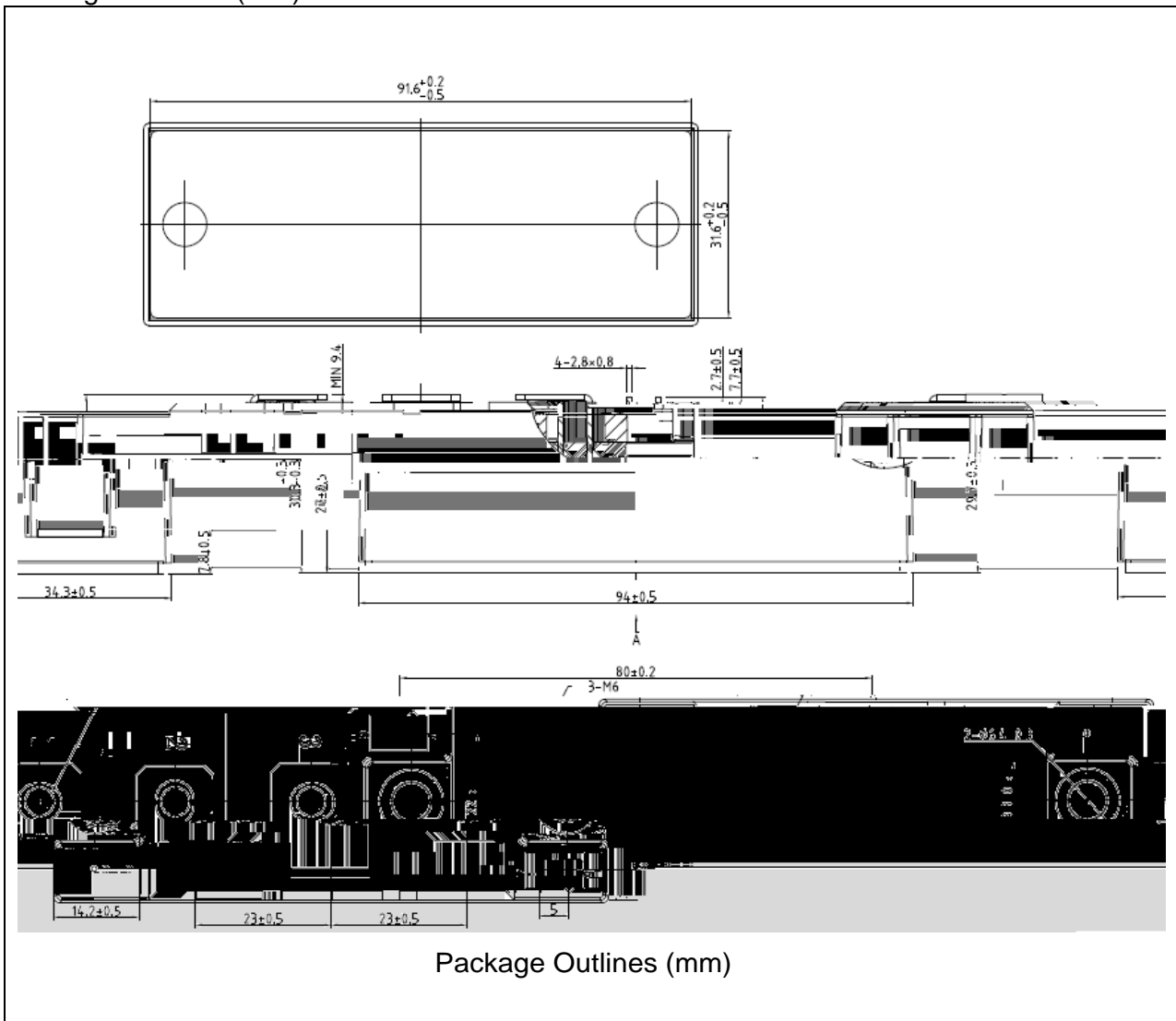
Typical Electrical & Thermal Characteristics



Circuit Diagram



Package Outlines (mm)



Package Outlines (mm)

