JMT160KT16T2C

Thyristor Module

Features

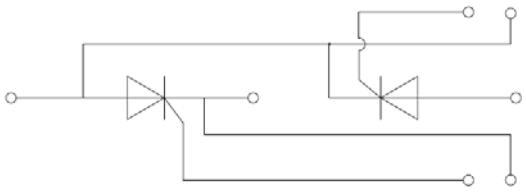
- Half-bridge SCR configuration integrated in a single package
- High-thermal-conductivity DBC insulation for excellent heat dissipation
- Vacuum soldering technology for enhanced reliability

Product Summary

Parameter	Value	Unit
V_{RRM}	1600	V
$I_{T(AV)}$(@ T_C = 85)	160	A
I_{TSM}(@ t_P = 10ms)	3200	A
V_T(Max)	1.80	V

Applications

- Heating control
- Light control system
- DC motor



Absolute Maximum Ratings (@ T_C = 25°C unless otherwise specified)

Parameter	Conditions	Symbol		
Non-repetitive peak off-state voltage	**Tvj = 25°C**	**V_{DSM}**	**1700**	**V**
Non-repetitive peak reverse voltage	**Tvj = 25°C**	**V_{RSM}**	**1700**	**V**
Average forward current	**T_C = 85°C**	**$I_{T(AV)}$**	**160**	**A**
Forward surge current	**1/2 cycle, Sine wave, 50Hz Tvj = 25**	I_{TSM}	3200	A
I^2t value for fusing		I^2t	51200	A^2s
Critical rate of rise of on-state current	I_G=2×I_{GT}	di/dt	150	A/μs
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	

Ordering Information

Device	Marking	Package	Weight	Inner Box	Pre Carton
JMT160KT16T2C	JMT160KT16T2C	T2	170 10g	6 PCS	72 PCS

Typical Electrical & Thermal Characteristics

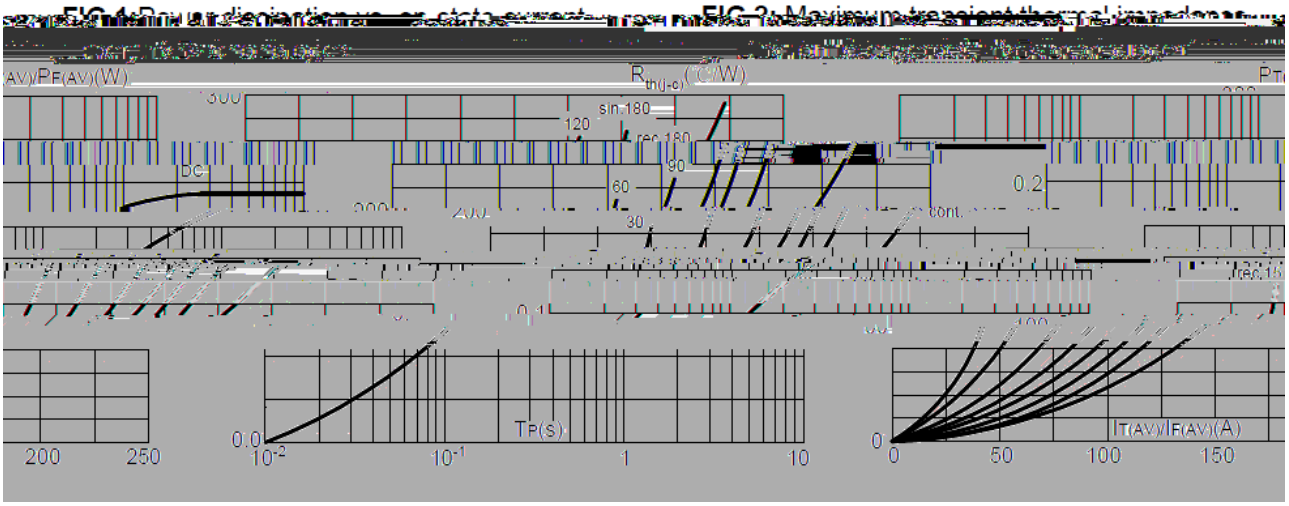
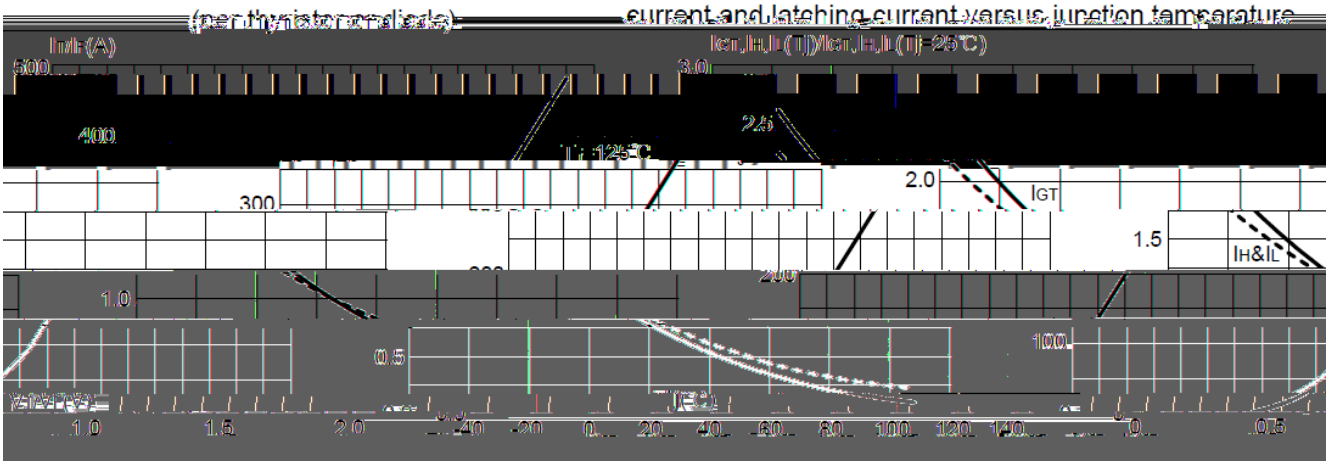


FIG.3: Forward characteristics (per thyristor or diode)

FIG.4: Relative variations of gate trigger current, holding current and latching current versus junction temperature



Circuit Diagram

Package Outlines (mm)

Unit of measurement: mm

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie