



浙江芯芯电子有限公司
ZHEJIANG XINXIN ELECTIRICAL CO., LTD.

产品规格书

Specification of Products

产品名称：可控硅模块

产品型号：MTC160A

浙江芯芯电子有限公司

ZHEJIANG XINXIN ELECTIRICAL CO., LTD.

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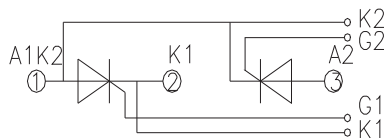
拟制	审核	核准
丁国盛	李园利	麻伟阳

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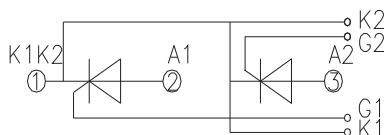
SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sinewave 50Hz Single side cooled, T _C =85 °C	125			160	A
I _{T(RMS)}	RMS on-state current	Single side cooled, T _C =85 °C	125			251	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V _{DRM} &V _{RRM} tp=10ms V _{DSM} &V _{RSM} = V _{DRM} &V _{RRM} +200V respectively	125	600		1600	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			20	mA
I _{TSM}	Surge on-state current	10ms half sinewave	125			5.40	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}				149	A ² s*10 ³
V _{TO}	Threshold voltage		125			0.8	V
r _T	On-state slop resistance					1.69	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =480A	125			1.4	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			800	V/μs
di/dt	Critical rate of rise of on-state current	From 67%V _{DRM} to 480A, Gate source 1.5A t _r ≤0.5μs Repetitive	125			100	A/μs
I _{GT}	Gate trigger current	V _A =12 V, I _A =1A	25	30		150	mA
V _{GT}	Gate trigger voltage			1.0		2.0	V
I _H	Holding current			20		100	mA
V _{GD}	Non-trigger gate voltage	At 67%V _{DRM}	125			0.2	V
R _{th(j-c)}	Thermal resistance Junction to heatsink	At 180° sine Single side cooled				0.170	°C/W
V _{iso}	Isolation voltage	50Hz, R.M. S, t=1min, I _{iso} : 1mA (MAX)		2500			V
F _m	Thermal connection torque (M6)				3.0		N.m
	Mounting torque (M6)				3.0		N.m
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				220		g
Outline							

OUTLINE DRAWING & CIRCUIT DIAGRAM

MTC



MTK



Rating and Characteristic

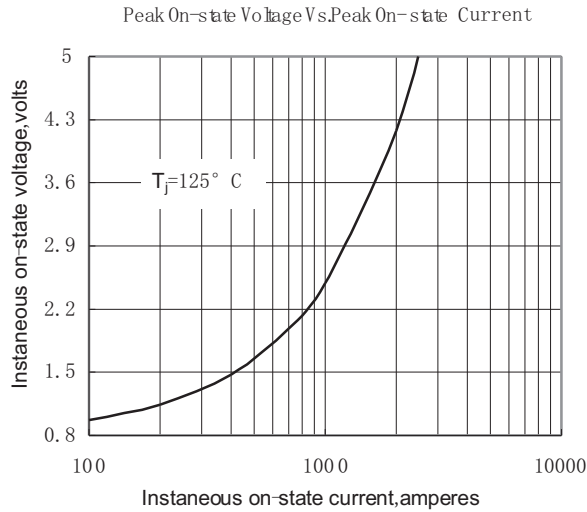


Fig. 1

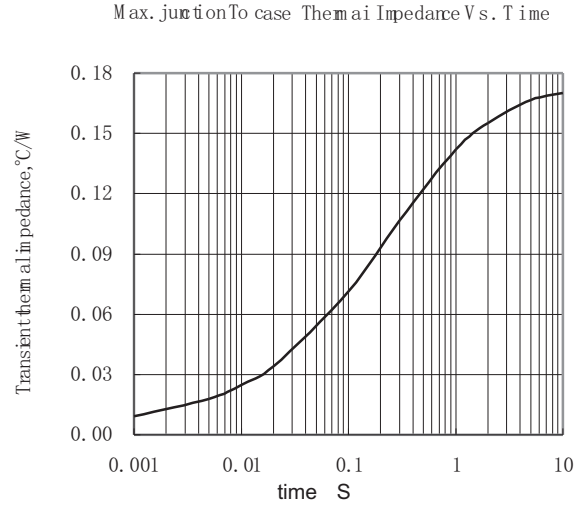


Fig. 2

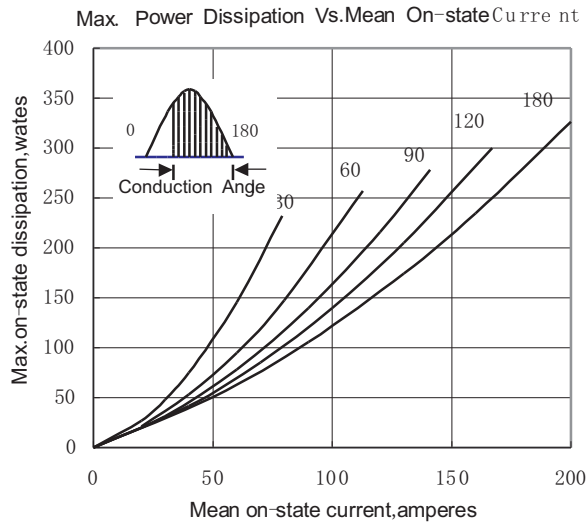


Fig. 3

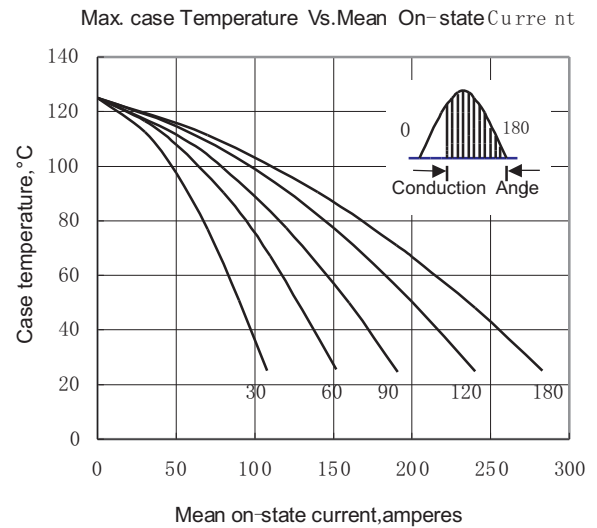


Fig. 4

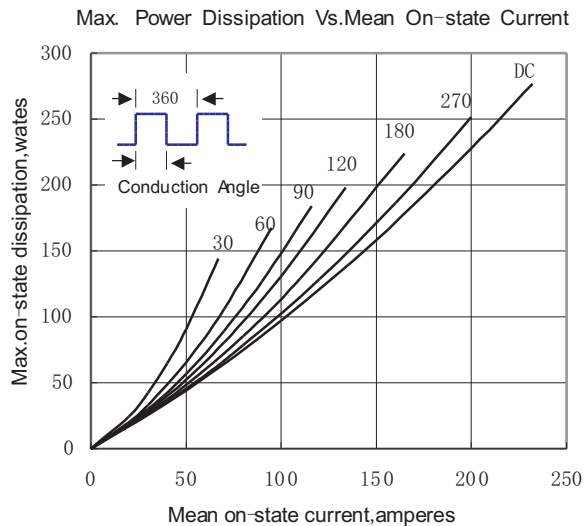


Fig. 5

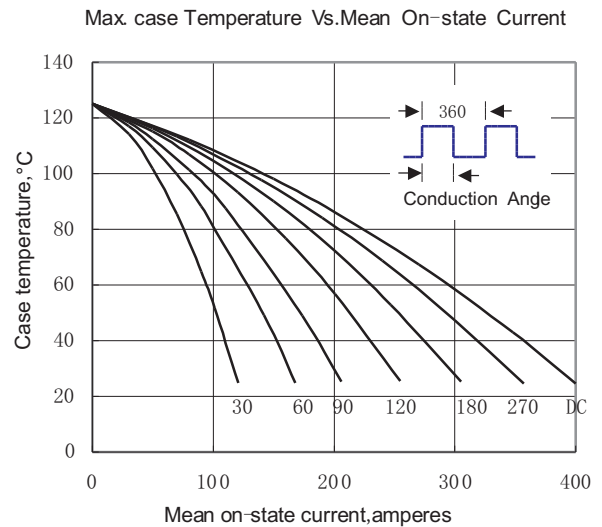


Fig. 6

Rating and Characteristic

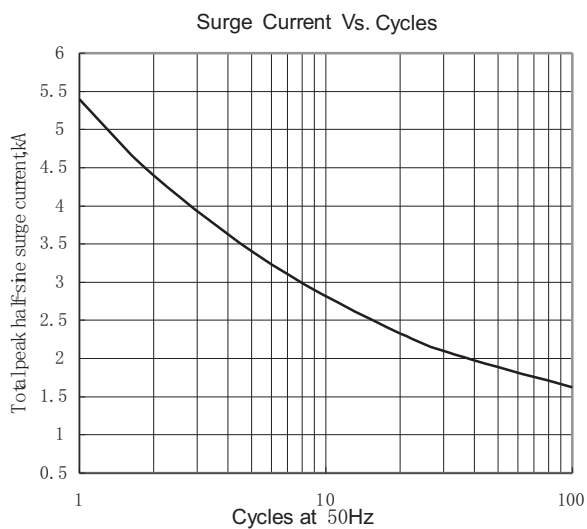


Fig. 7

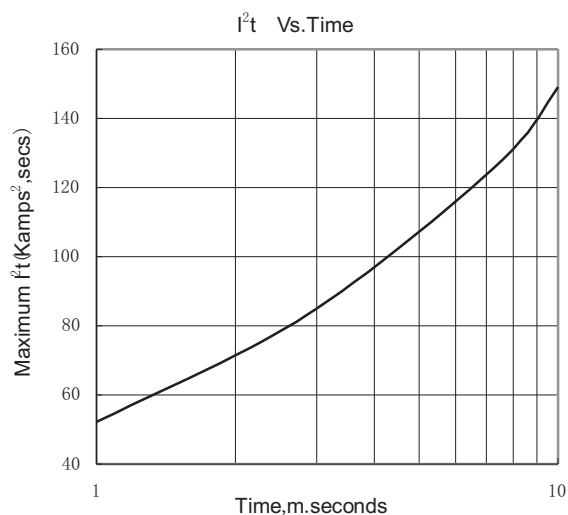


Fig. 8

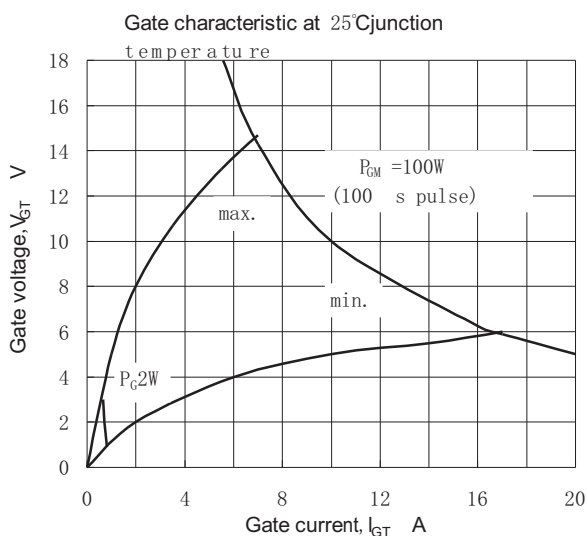


Fig. 9

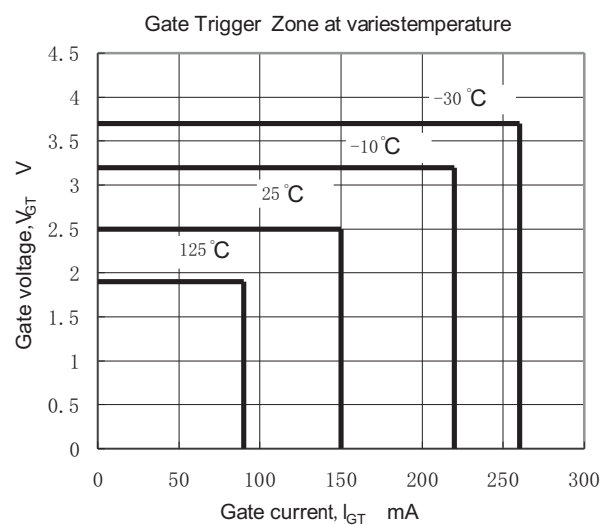


Fig. 10

Technical drawing of a terminal block showing front and side views with dimensions and callouts.

Front View Dimensions:

- Overall width: 94
- Overall height: 34
- Segment widths: 24, 23, 23
- Terminal width: 14
- Internal segment width: 80
- Terminal height: 13

Side View Dimensions:

- Overall height: 38
- Terminal height: 27
- Terminal width: 6
- Terminal thickness: 0.8

Callouts:

- 2-2.8X0.8 (Terminal screws)
- 2- $\phi 6.3$ (Terminal holes)
- 3-M6 (Terminal holes)
- 1, 2, 3 (Terminal positions)
- K1, K2 (Terminal markings)
- G1, G2 (Terminal markings)

