



浙江世菱半导体有限公司
ZHEJIANG SHILING SEMICONDUCTOR CO.,LTD.

产品规格书

Specification of products

产品名称：可控硅模块

产品型号：MTC130A-T05

浙江世菱半导体有限公司
ZHEJIANG SHILING SEMICONDUCTOR CO., LTD.

地址：浙江省 丽水市 莲都区

电话：(0578) 3012571 3615078

传真：(0578) 3611180

邮编：323000

E-mail: smrshiling01@163.com

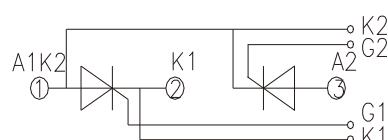
[Http://www.smrshiling.com](http://www.smrshiling.com)

拟制	审核	核准
林益龙	曹剑龙	宗瑞

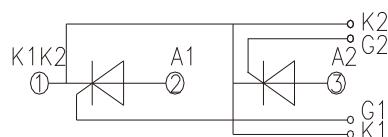
SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _J (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)} I _{F(AV)}	Mean on-state current	180° half sine wave 50Hz Single side cooled, T _C =85°C	125			130	A
I _{T(RMS)}	RMS on-state current	Single side cooled, T _C =85°C	125			212	A
V _{DRM} V _{RRM}	Repetitive peakoff-state 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			3.80	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}				73.6 A ² s*10 ³	
V _{TO}	Threshold voltage		125			0.8	V
r _T	On-state slop resistance					2.12	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =390A	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 405A, Gate source 1.5A t _r ≤0.5 μ sRepetitive	125			100	A/ μs
I _{GT}	Gate trigger current		25	20		150	mA
V _{GT}	Gate trigger voltage	V _A =12V, I _A =1A		0.8		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				0.200	°C /W
V _{iso}	Isolation voltage	50Hz, RM. S, t=1min, I _{iso} : 1mA (MAX)	2500				V
F _m	Thermal connection torque (M6)				5.0		N.m
	Mounting torque (M6)				5.0		N.m
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				220		g
Outline							

OUTLINE DRAWING & CIRCUIT DIAGRAM

MTC



MTK



Rating and Characteristic

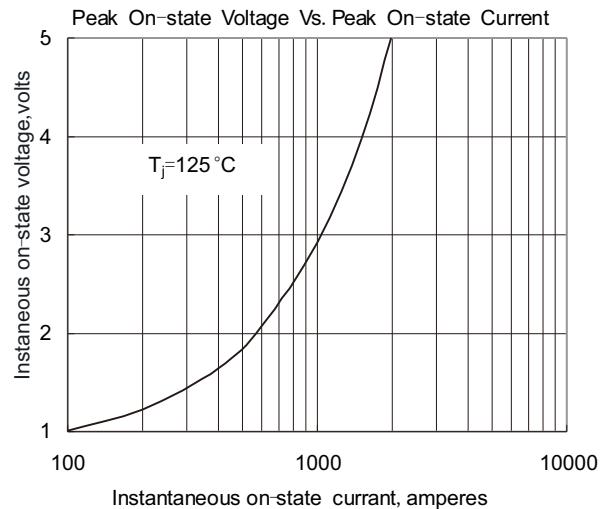


Fig.1

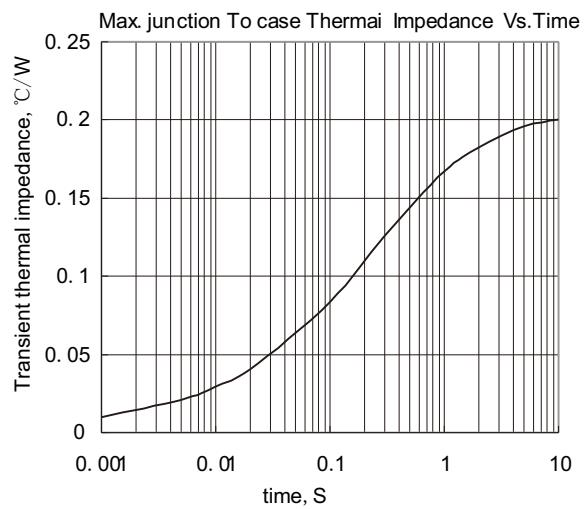


Fig.2

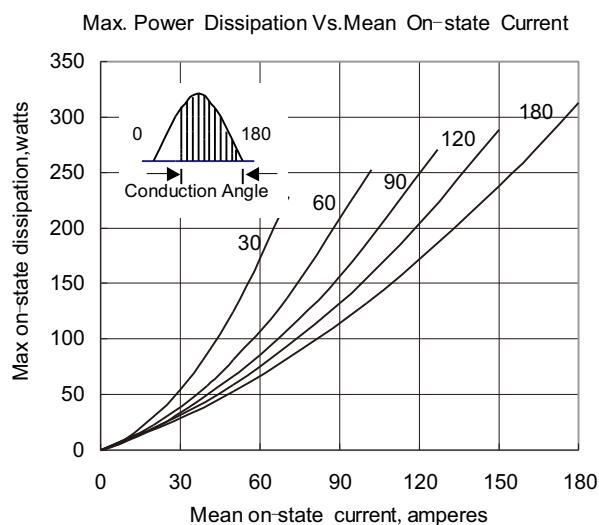


Fig.3

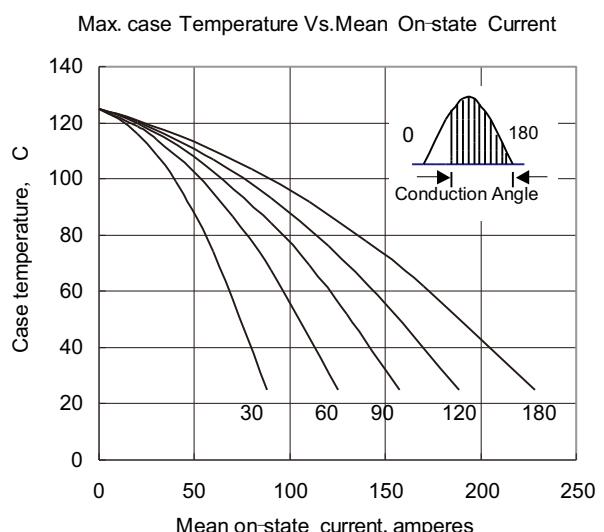


Fig.4

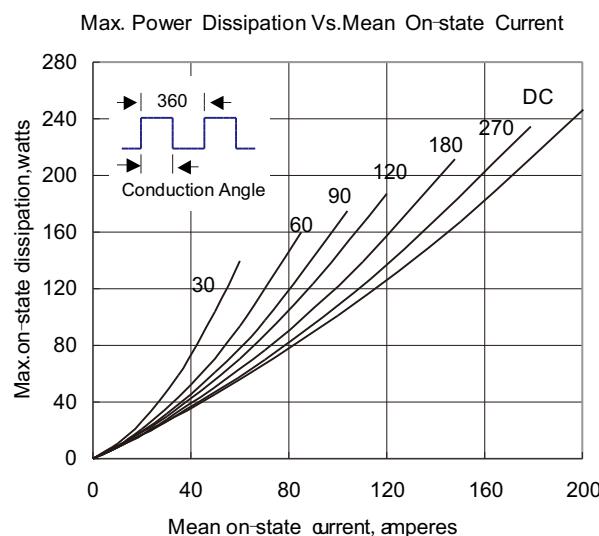


Fig.5

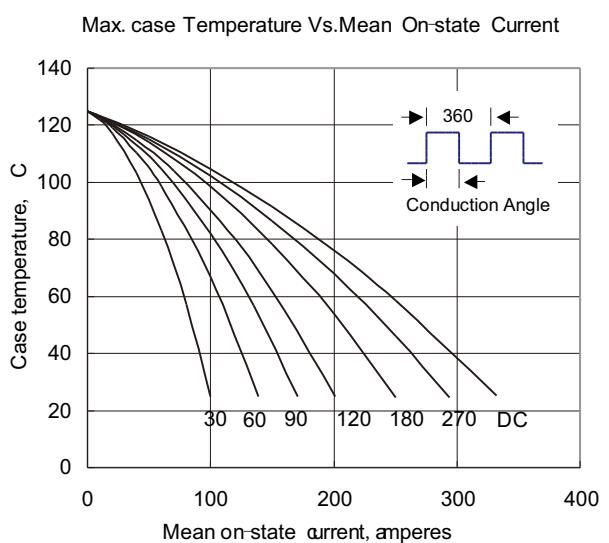


Fig.6

Rating and Characteristic

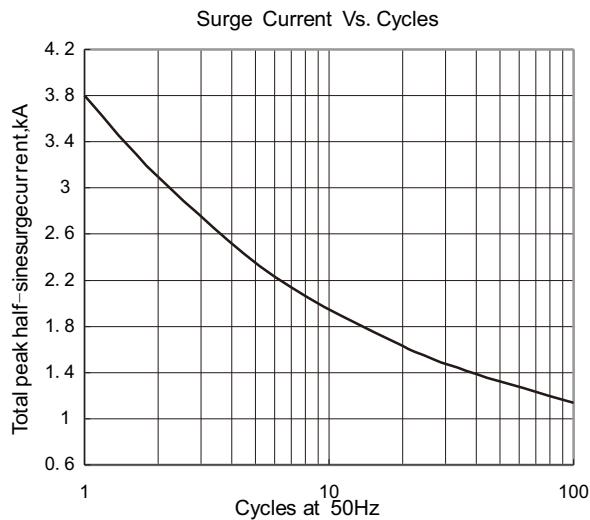


Fig. 7

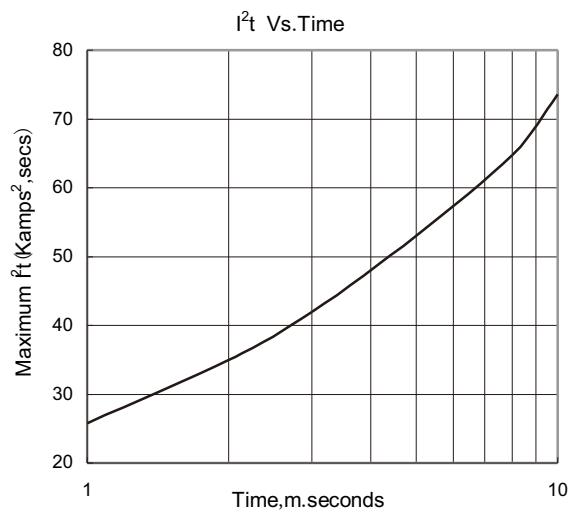


Fig. 8

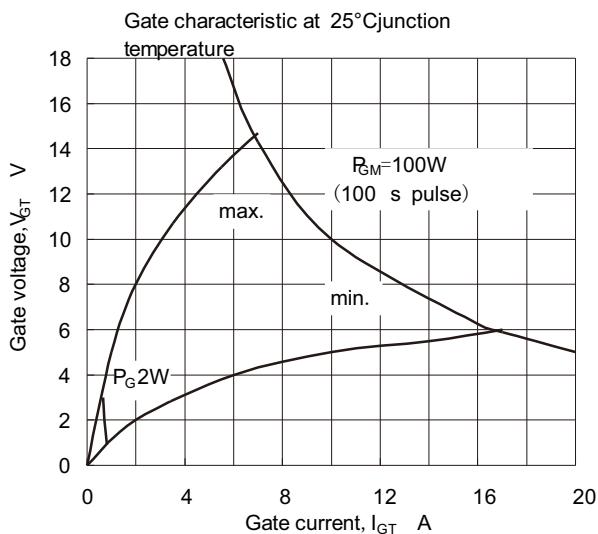


Fig. 9

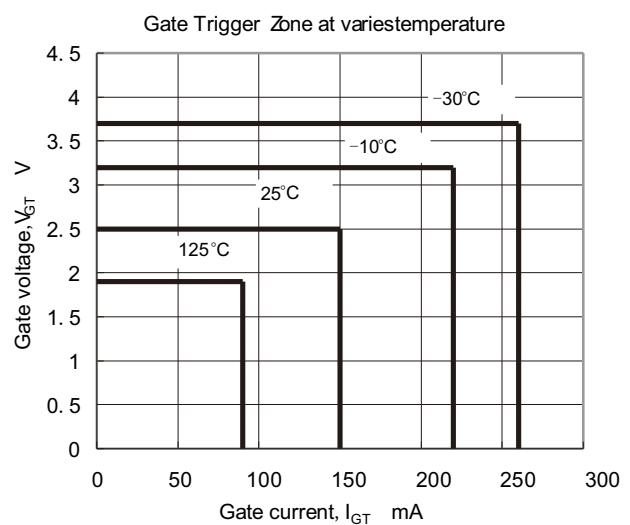


Fig. 10

Outside Dimension

