

## 产品规格书

### Specifcation of products

产品名称:可控硅模块

产品型号: SKKT96A/16E-T02

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

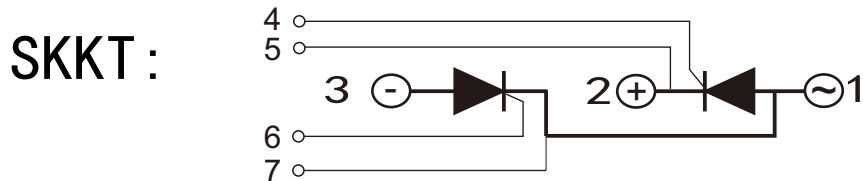
E-mail: smrshiling01@163.com

Http://www.smrshiling.com

拟制	审核	核准
林益龙	曹剑龙	宗瑞

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (C)	VALUE			UNIT
				Min	Type	Max	
I <sub>T(AV)</sub>	Mean on-state current	180 half sine wave 50Hz Single side cooled, T <sub>c</sub> =85 C	125			96	A
I <sub>T(RMS)</sub>	RMS on-state current		125			150	A
V <sub>DRM</sub> V <sub>RRM</sub>	Repetitive peak on-state voltage Repetitive peak reverse voltage	V <sub>DRM</sub> & V <sub>RRM</sub> tp=10ms V <sub>DsM</sub> & V <sub>RsM</sub> = V <sub>DRM</sub> & V <sub>RRM</sub> +200V	125	600		1800	V
I <sub>DRM</sub> I <sub>RRM</sub>	Repetitive peak current	at V <sub>DRM</sub> at V <sub>RRM</sub>	125			12	mA
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave	125			1.80	KA
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =60%V <sub>RRM</sub>				16.2	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>TO</sub>	Threshold voltage		125			0.8	V
r <sub>T</sub>	On-state slop resistance					3.01	mΩ
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =300A	25			1.50	V
dv/dt	Critical rate of rise of off-state voltage V	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A t <sub>r</sub> ≤ 0.5 μs Repetitive	125			100	A/μs
I <sub>GT</sub>	Gate trigger current	V <sub>A</sub> =12V, I <sub>A</sub> =1A	25	30		100	mA
V <sub>GT</sub>	Gate trigger voltage			1.0		2.5	V
I <sub>H</sub>	Holding current			20		120	mA
V <sub>GD</sub>	Non-trigger gate voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125	0.2			V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled per chip				0.280	C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled per chip				0.15	C /W
V <sub>iso</sub>	Isolation voltage	50Hz,R.M.S,t=1min,I <sub>iso</sub> :1mA(MAX)		2500			V
F <sub>m</sub>	Thermal connection torque(M5)				4.0		N m
	Mounting torque(M6)				5.0		N m
T <sub>stg</sub>	Stored temperature			-40		125	C
W <sub>t</sub>	Weight				122		g
Outline	T-02						

### OUTLINE DRAWING & CIRCUIT DIAGRAM



### Rating and Characteristic

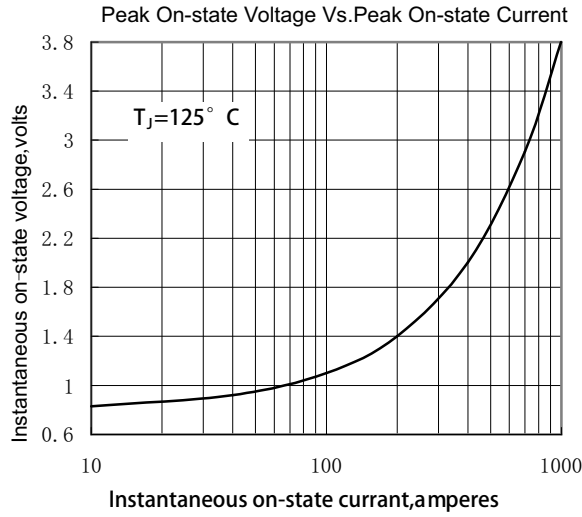


Fig.1

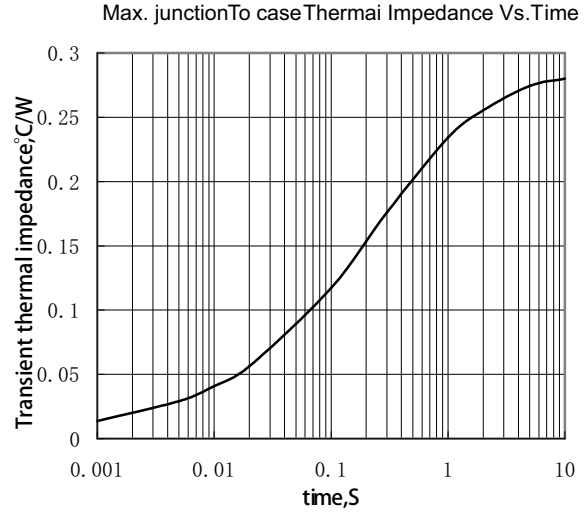


Fig.2

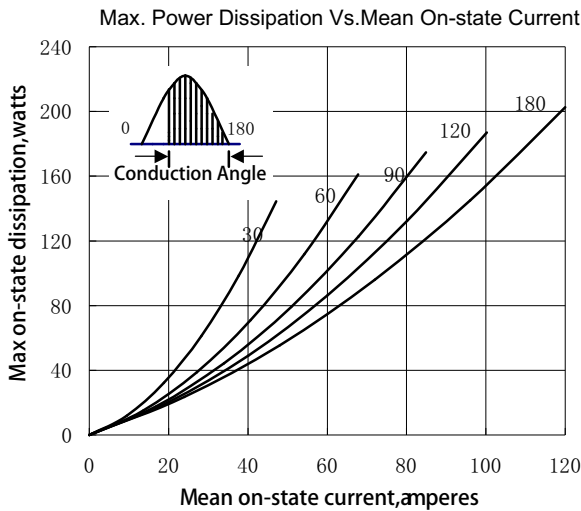


Fig.3

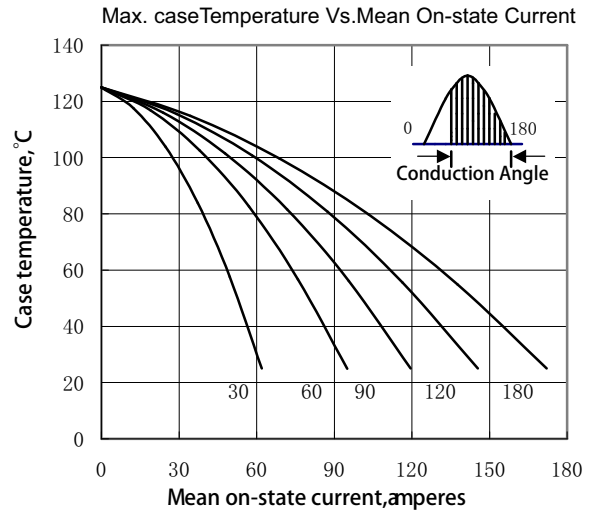


Fig.4

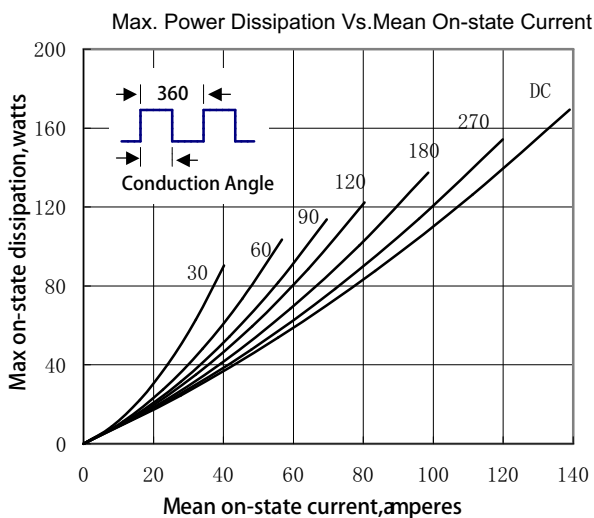


Fig.5

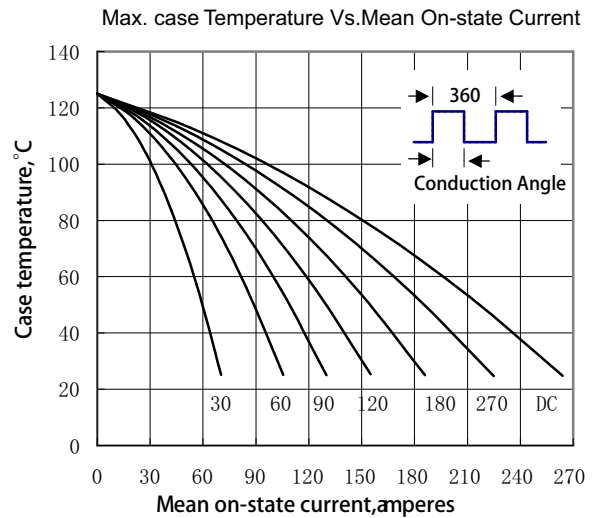


Fig.6

### Rating and Characteristic

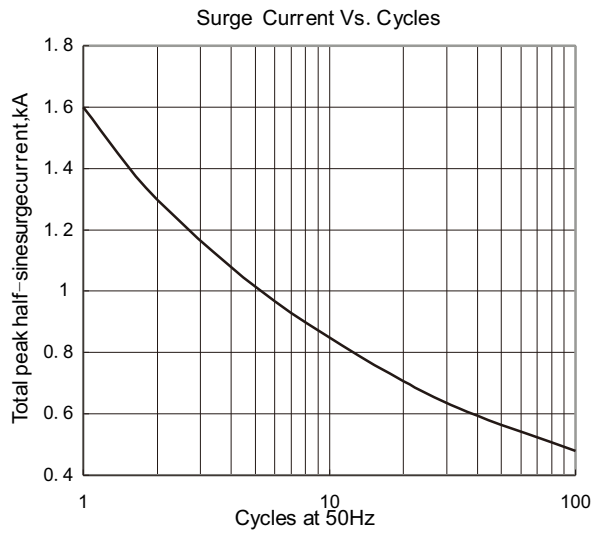


Fig. 7

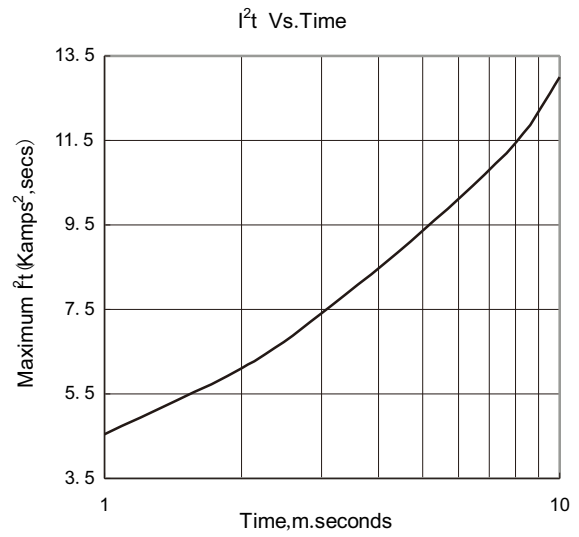


Fig. 8

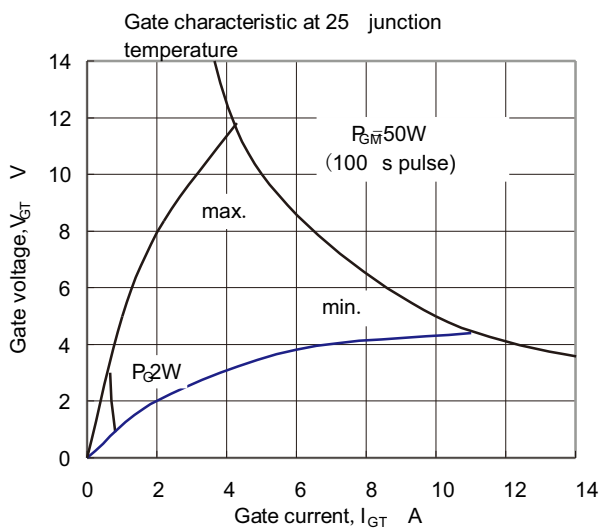


Fig. 9

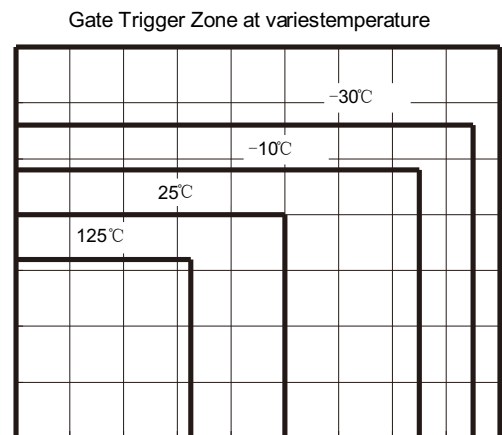


Fig. 10

## Outside Dimension

