



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：SKKH106A/16E-T02

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

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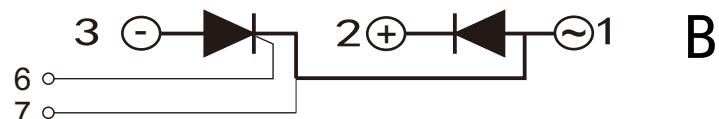
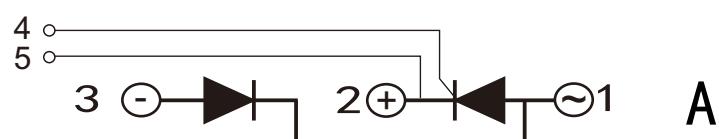
[Http://www.smrshiling.com](http://www.smrshiling.com)

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	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_C=85^\circ\text{C}$	125			106	A
$I_{T(RMS)}$	RMS on-state current	Single side cooled, $T_C=85^\circ\text{C}$	125			166	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DsM} \& V_{RsM} = V_{DRM} \& V_{RRM} + 200\text{V}$ respectively	125		1600	1800	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	125			12	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave	125			2.40	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=60\%V_{RRM}$				29.3 $\text{A}^2\text{s} \times 10^3$	
$V_{TO}$	Threshold voltage		125			0.8	V
$r_T$	On-state slop resistance					2.29	$\text{m}\Omega$
$V_{TM}$	Peak on-state voltage	$I_{TM}=318\text{A}$	125			1.40	V
$V_{FM}$	Peak on-state voltage	$I_{FM}=318\text{A}$	125			1.10	V
$dv/dt$	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			1500	$\text{V}/\mu\text{s}$
$di/dt$	Critical rate of rise of on-state current	From 67% $V_{DRM}$ to 330A, Gate source 1.5A $t_r \leqslant 0.5 \mu\text{s}$ Repetitive	125			150	$\text{A}/\mu\text{s}$
$I_{GT}$	Gate trigger current	$V_A=12\text{V}, I_A=1\text{A}$	25	30		150	mA
$V_{GT}$	Gate trigger voltage			0.8		1.8	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				0.250	$^\circ\text{C}/\text{W}$
$V_{iso}$	Isolation voltage	50Hz, RM. S, t=1min, $I_{iso} : 1\text{mA (MAX)}$		2500			V
$F_m$	Thermal connection torque( M5)					4.0	N.m
	Mounting torque( M6)					5.0	N.m
$T_{stg}$	Stored temperature			-40		150	$^\circ\text{C}$
$W_t$	Weight					122	g
Outline							

## OUTLINE DRAWING & CIRCUIT DIAGRAM

SKKH:



## Rating and Characteristic

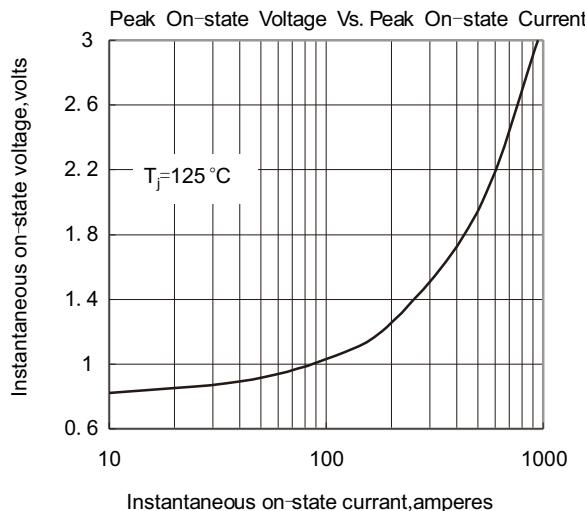


Fig. 1

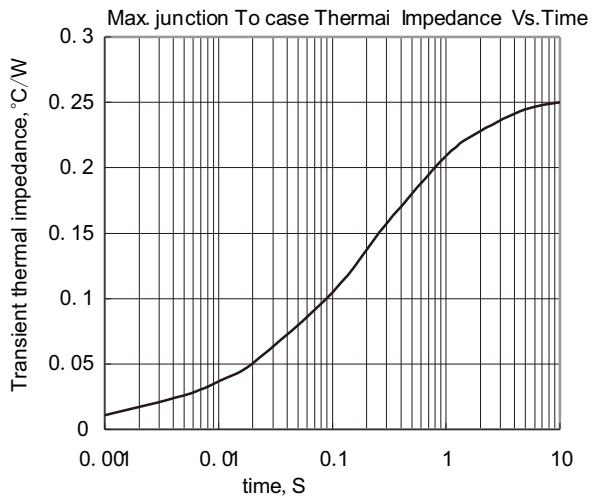


Fig. 2

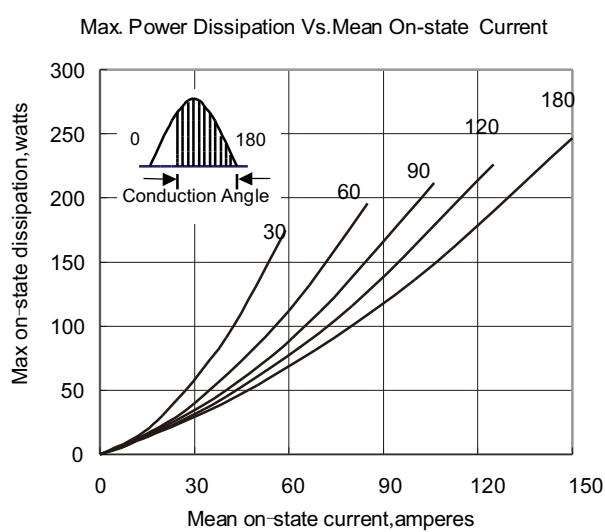


Fig. 3

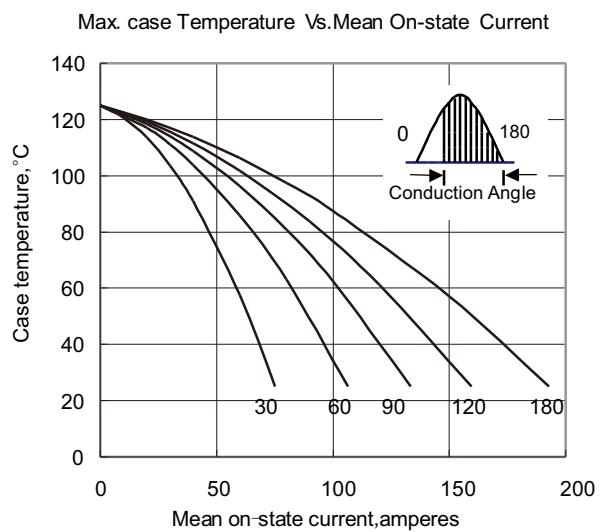


Fig. 4

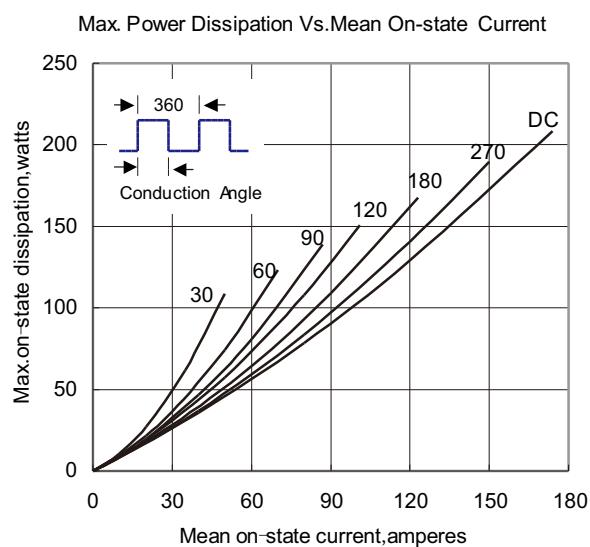


Fig. 5

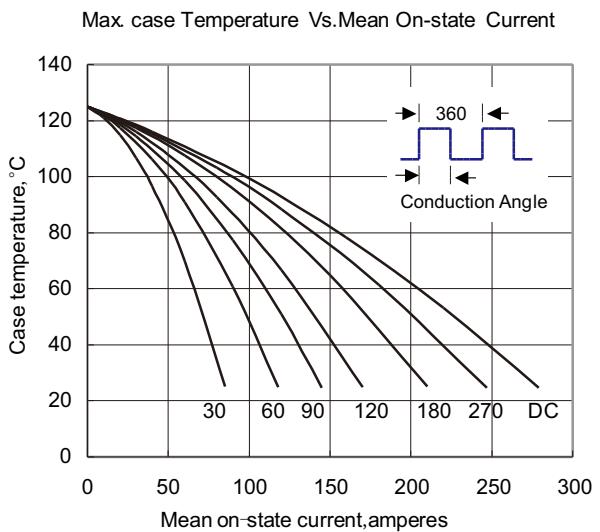


Fig. 6

## Rating and Characteristic

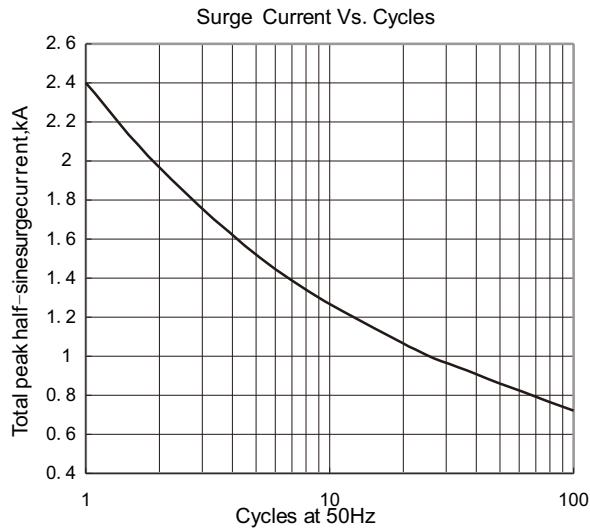


Fig. 7

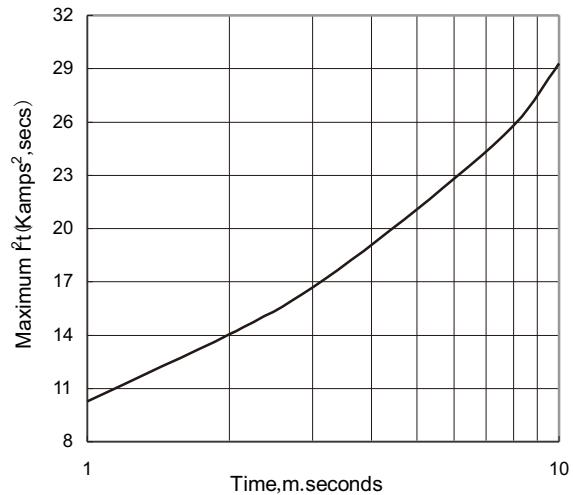


Fig. 8

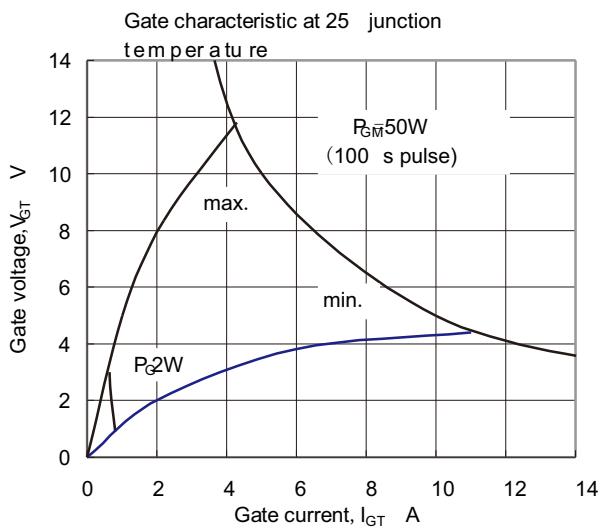


Fig. 9

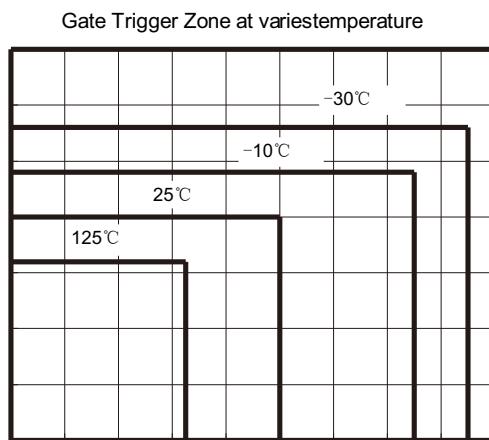


Fig. 10

## Outside Dimension

