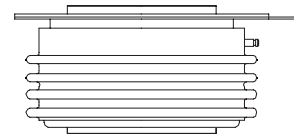


### FEATURES

- |  |                   |               |
|--|-------------------|---------------|
| 1). Interdigitated amplifying gates              | $I_{T(AV)}$       | 420A          |
| 2). Fast turn-on and high di/dt                  | $V_{DRM}/V_{RRM}$ | 800~1400V     |
| 3). Low switching losses                         | $t_q$             | 16~24 $\mu$ s |
| 4). Short turn-off time                          | $I_{TSM}$         | 5.8KA         |
| 5). Hermetic metal cases with ceramic insulators |                   |               |



### TYPICAL APPLICATIONS

- |                               |  |
|-------------------------------|--|
| 1). Inductive heating         | 4). AC motor speed control               |
| 2). Electronic welders        | 5). General power switching applications |
| 3). Self-commutated inverters |  |

### THE MAIN PARAMETERS

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, $T_{hs}=55^{\circ}C$	125			420	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}, t_p=10ms$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$	125	800		1400	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak off-state current Repetitive peak reverse current	$V_D = V_{DRM}$ $V_R = V_{RRM}$	125			30	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave	125			5.8	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R = 0.6V_{RRM}$				168	$A^2s \cdot 10^3$
$V_{TO}$	Threshold voltage		125			1.67	V
$r_T$	On-state slop resistance					1.32	$m\Omega$
$V_{TM}$	Peak on-state voltage	$I_{TM}=1000A, F=7.0KN$	125			2.46	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$	125			200	$V/\mu s$
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ to 800A, Gate pulse $t_r \leq 0.5 \mu s, I_{GM}=1.5A$	125			1500	$A/\mu s$
$I_m$	Reverse recovery current	$I_{TM}=400A, t_p=1000 \mu s,$ $di/dt=-20A/\mu s,$ $VR=50V$	125		30		A
$t_{rr}$	Reverse recovery time				2.5		$\mu s$
$Q_{rr}$	Recovery charge				38	50	$\mu C$
tq	Circuit commutated turn-off time	$I_{TM}=400A, t_p=1000 \mu s, V_R=50V$ $dv/dt=30V/\mu s, di/dt=-20A/\mu s$	125	16		24	$\mu s$
$I_{GT}$	Gate trigger current			30		200	mA
$V_{GT}$	Gate trigger voltage	$V_A=12V, I_A=1A$	25	0.8		2.5	V
$I_H$	Holding current			20		250	mA
$V_{GD}$	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125	0.3			V
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180° sine, double side cooled Clamping force 7.0KN				0.055	$^{\circ}C/W$
$F_m$	Mounting force			5.3		10	KN
$T_{stg}$	Stored temperature			-40		140	$^{\circ}C$
$W_t$	Weight				80		g
Size	Package box size		160 × 145 × 65				mm

**PERFORMANCE CURVES FIGURE**

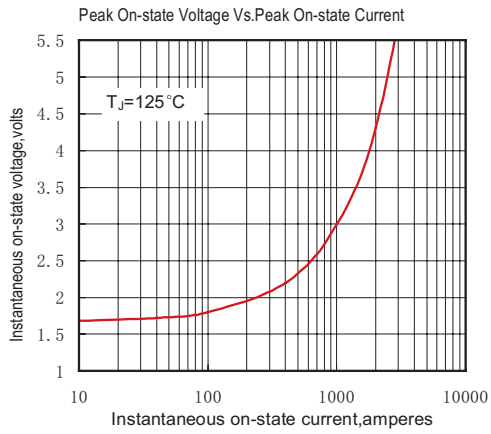


Fig.1

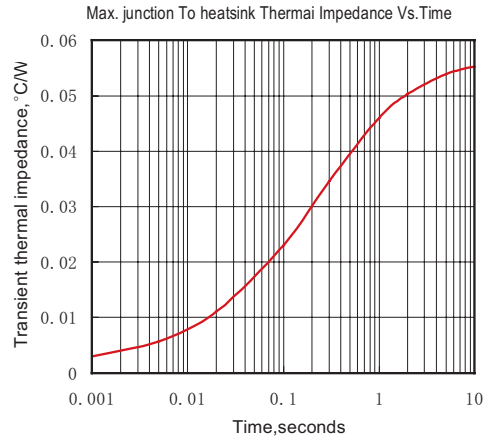


Fig.2

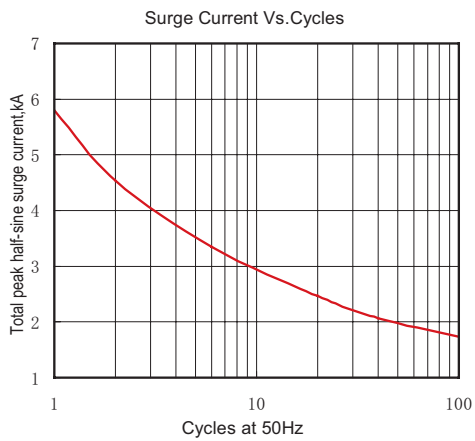


Fig.3

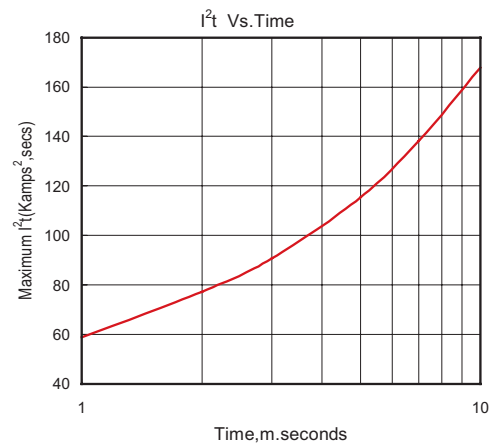


Fig.4

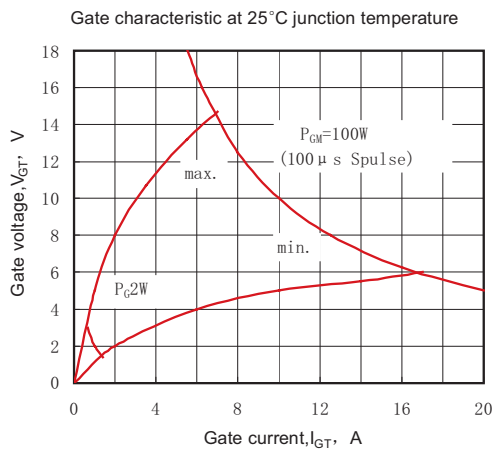


Fig.5

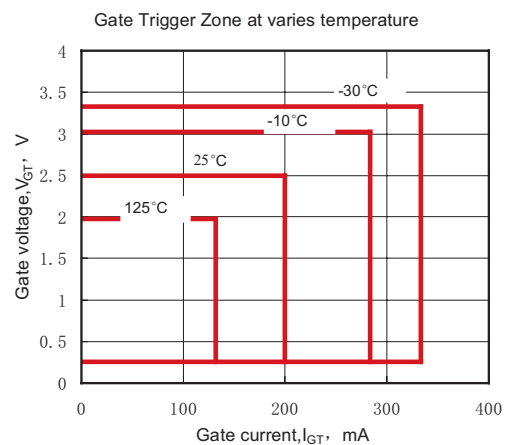
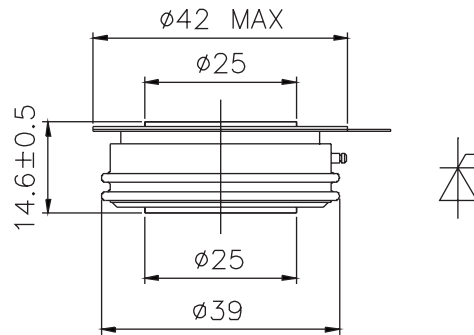
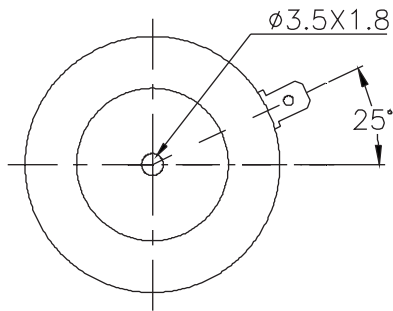


Fig.6

**OUTLINE**



**YUEQING LIUJING RECTIFIER CO., LTD**

Sale Department: Liujing Building, Yueqing City,  
Zhejiang Province

Add: Wanao Industrial Zone, Yueqing city,  
Zhejiang Province

Tel: 0086-577-62519692    0089-577-62519693

Fax: 0086-577-62518692

International Export: 0086-577-62571902

Technical Support: 0086-15868768965

After Service: 400-6606-086

<http://www.china-liujing.com>

<http://www.liujingdianqi.cn>

<http://www.cnrectifier.com>

<http://www.cnthyristor.com.cn>

MSN: [thristors@hotmail.com](mailto:thristors@hotmail.com)

**打造最具竞争力的电力半导体产品**

To be the most competitive Power Semiconductor  
Devices manufactory.

LIUJING reserves the right to change limits, test conditions and dimensions.

윤정은 이 칼타로그 중에 데이트, 테스트 조건, 외형사이즈에 대한 최종 해석권을 가지고 있습니다.