KG500A800~1400V
Y38KAD

国标型-高频晶闸管(平板式)

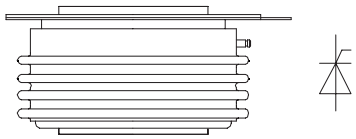
Chinese Type High Frequency Thyristors (Capsule Version)

Liujing rectifier co., Ltd.

FEATURES

1). Interdigitated amplifying gates
2). Fast turn-on and high di/dt
3). Low switching losses
4). Short turn-off time
5). Hermetic metal cases with ceramic insulators

$I_{T(AV)}$	675A
V_{DRM}/V_{RRM}	800~1400V
t_q	16~24 μs
I_{TSM}	9.3KA



TYPICAL APPLICATIONS

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

THE MAIN PARAMETERS

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(℃)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, T_{hs}=55℃	125			675	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}+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			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125			9.3	KA
I^2t	I^2T for fusing coordination					432	A^2s*10^3
V_{TO}	Threshold voltage		125			1.50	V
r_T	On-state slop resistance					0.88	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=1200A, F=15KN	125			2.56	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM}=0.67V_{DRM}	125			200	V/μs
di/dt	Critical rate of rise of on-state current	V_{DM}= 67%V_{DRM} to1200A, Gate pulse t_r ≤0.5 μs I_{GM}=1.5A	125			1500	A/μs
I_{rm}	Reverse recovery current	I_{TM}=600A,tp=1000 μs, di/dt=-20A/ μs, VR=50V	125		30		A
t_{rr}	Reverse recovery time				2.2		μs
Q_{rr}	Recovery charge				33	50	μC
tq	Circuit commutated turn-off time	I_{TM}=600A,tp=1000 μs, V_R =50V dv/dt=30V/ μs ,di/dt=-20A/ μs	125	16		24	μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		250	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			20		400	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 15KN				0.035	℃ /W
F_m	Mounting force			10		20	KN
T_{stg}	Stored temperature			-40		140	℃
W_t	Weight				270		g
Size	Package box size	95 × 95 × 50					

PERFORMANCE CURVES FIGURE

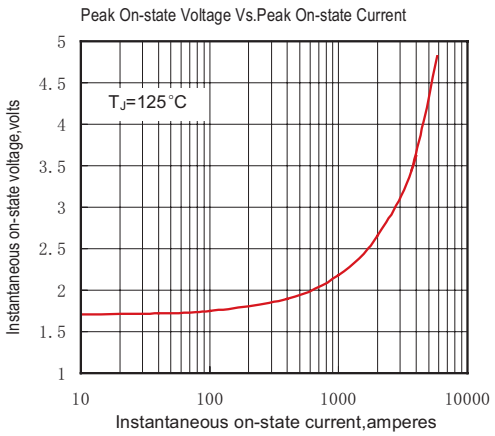


Fig.1

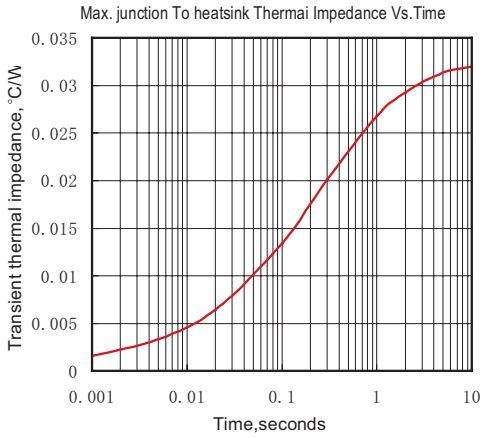


Fig.2

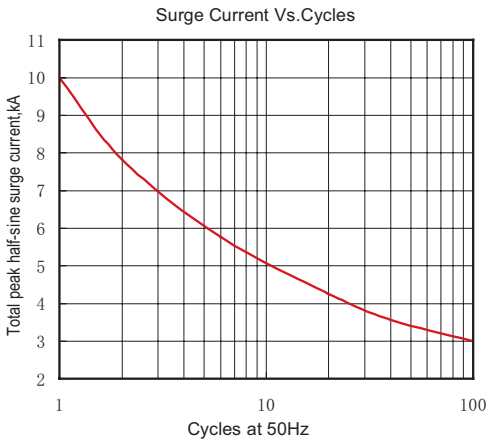


Fig.3

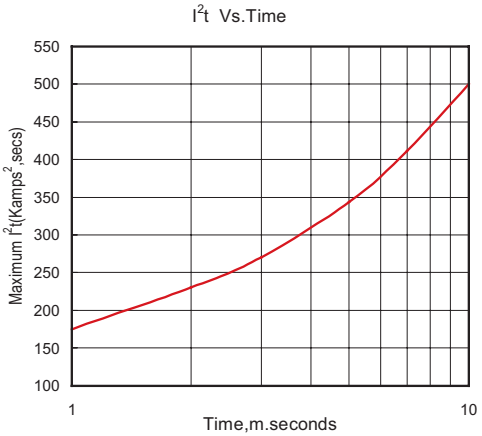


Fig.4

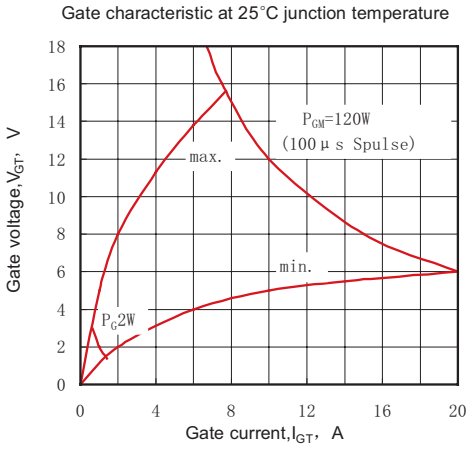


Fig.5

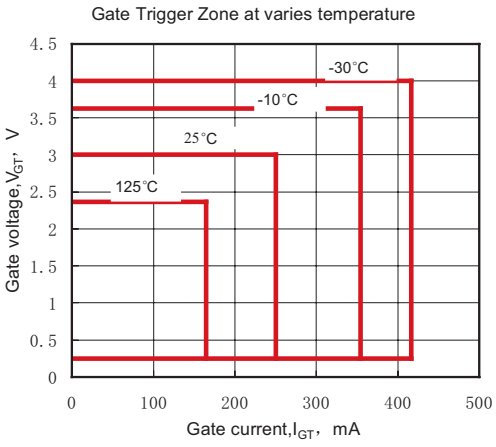
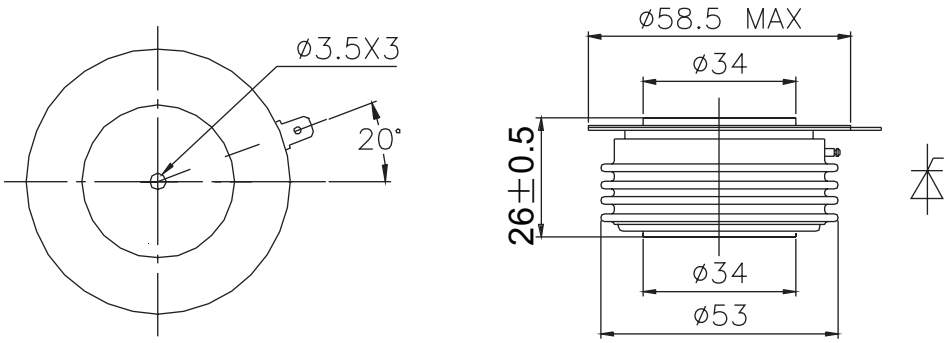


Fig.6

OUTLINE



E-mail: rectifier@163.com thyristors@yahoo.cn

YUEQING LIUJING RECTIFIER CO., LTD
Sale Departmant: 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

打造最具竞争力的电力半导体产品

To be the most competitive Power Semiconductor Devices manufactory.