Fast Thyristor
KK 2500A 1200~1800V

Feature

- Full diffusion process,capsule type ceramic package
- Distributed extension to amplify the gate structure
- Excellent dynamic characteristic
- Low switching loss,Doule-sided cooling
- Fast switching performance

$I_{T(AV)}$	2500A
V_{DRM}/V_{RRM}	1200-1800V
Tq	40-80us
I_{TSM}	35.6KA

SYMBOL	CHARCTERISTIC	TEST CONDITIONS	T_J (℃)	VALUE		UNIT
				Min	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wawe 50Hz Double side cooled, THS=55℃	125		2500	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repettive peak reverse voltage	V_{DRM}&V_{RRM} tp=10ms V_{DSM}&$V_{RSM=}V_{DRM}$&$V_{RRM+100V}$	125	1200	1800	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM=}V_{DRM}$ $V_{RM=}V_{RRM}$	125		200	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125		35.6	KA
I^2t	I^2t for fusing coordination				6337	$A^{2S*}10$
V_{TO}	Threshold voltage		125		1.3	V
r_T	On-state slop resistance				0.15	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=5000A,F=15KN	25		3.15	V
dv/dt	Critical rate of rise of-state voltage	V_{DM}=0.67V_{DRM}	125		1000	V/us
di/dt	Critical rate of rise of on-state current	V_{DM}=67%V_{DRM} TO 1000A, Gate pulse tr≤0.5us I_{GM}=1.5A	125		250	A/us
I_{TM}	Reverse recovery current	I_{TM}=5000A，tq=1000us Di/dt=-20A/us. V_r=50V	125	178		A
t_{rr}	Reverse recovery time			10.5		us
Q_{rr}	Recovery charge			934	1100	uC
tq	Circuit commutated turn-off time	I_{TM}=5000A,tq=1000us, di/dt=20a/us V_R=50V	125	40	80	us
I_{GT}	Gate trigger current	V_A=12V,I_A=1A	25	40	450	mA
V_{GT}	Gate trigger voltage			0.9	4.5	V
I_H	Holding current			20	1000	mA
V_{GD}	Npn-trigger gate voltage	V_{DM}=0.67V_{DRM}	125	0.3		V
$R_{th(j-h)}$	Thermal resistance Junction to heat sink	At180° sine double side cooled Clamping force 5.0kn			0.01	℃/W
F_M	Mounting force				56	KN
T_{stq}	Stored temperature			-40	140	℃
W_t	Weight				1440	g
Outline						

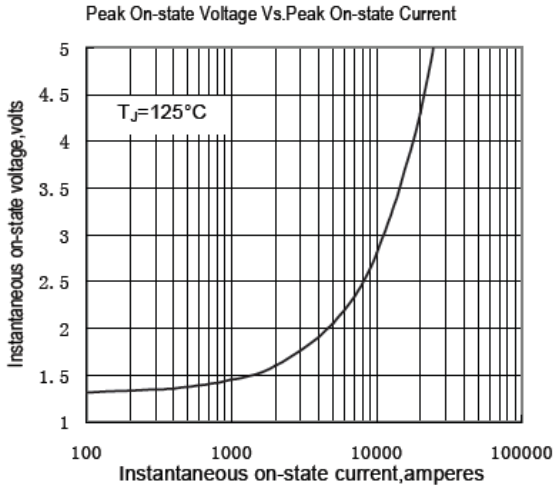


Fig.1

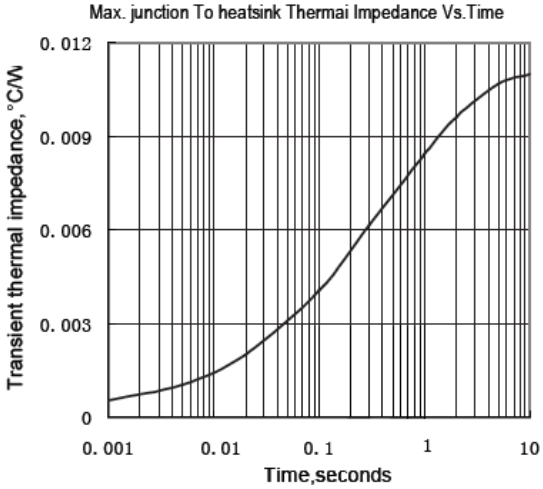


Fig.2

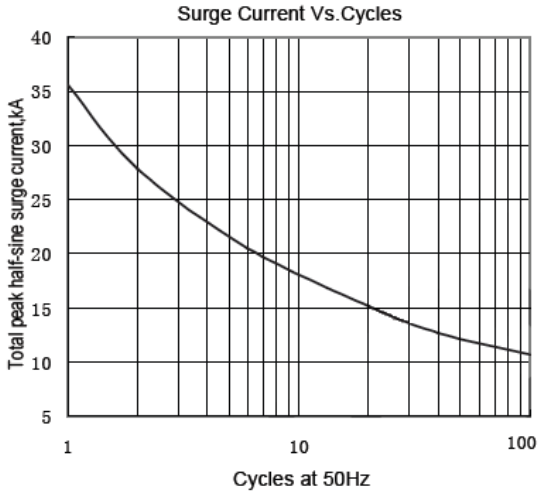


Fig.3

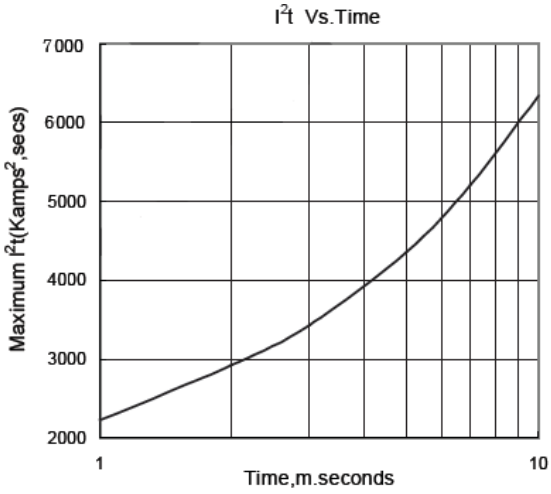


Fig.4

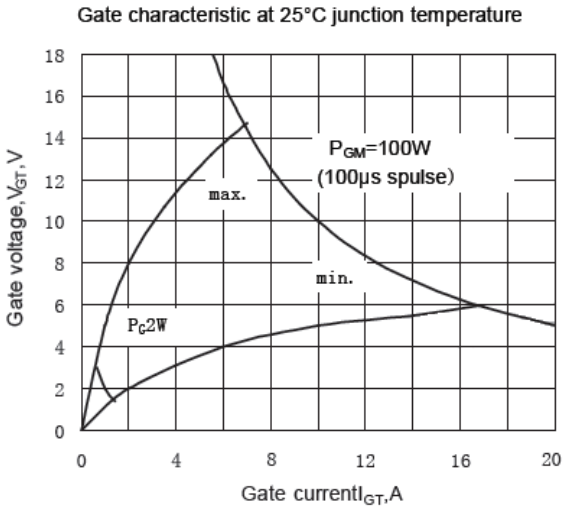


Fig.5

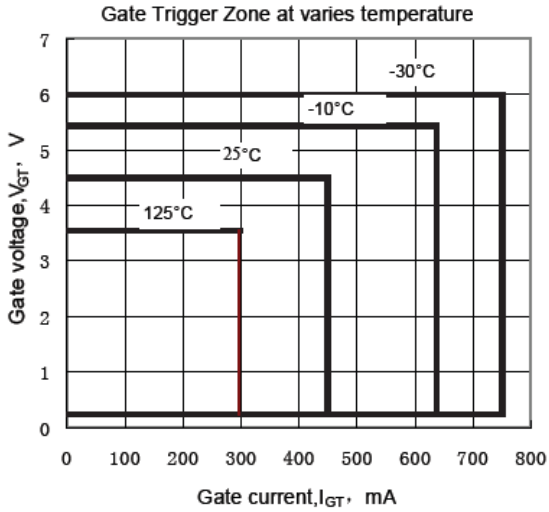
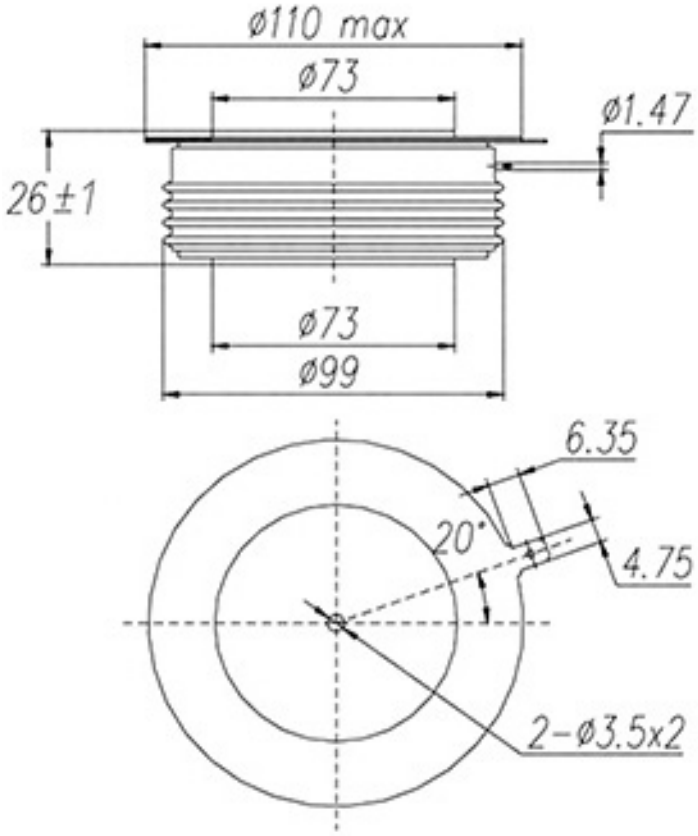


Fig.6

OUTLINE



Dimensions in mm