

**Features:**

- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

Typical Applications:

- AC controllers
- DC and AC motor control
- Controlled rectifiers

Part No. Y70KKG-KT60cT

$I_{T(AV)}$	2160A
V_{DRM}, V_{RRM}	2000V 2200V
	2500V
t_q	40~100μs

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled $T_c=55^{\circ}C$	125			2160	A
V_{DRM}/V_{RRM}	Repetitive peak off-state voltage	$t_p=10ms$	125	2000		2500	V
I_{DRM}/I_{RRM}	Repetitive peak current	at V_{DRM} $t_p=10ms$ at V_{RRM} $t_p=10ms$	125			160	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			22.7	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				2576	10^3A^2s
V_{TO}	Threshold voltage		125			1.48	V
r_T	On-state slope resistance					0.15	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=4000A$, $F=35kN$	25			3.15	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$	125			1000	V/μs
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ Single pulse	125			1200	A/μs
Q_{rr}	Recovery charge	$I_{TM}=2000A$, $t_p=4000\mu s$, $di/dt=-20A/\mu s$, $V_R=100V$	125		1500		μC
t_q	Circuit commutated turn-off time	$I_{TM}=2000A$, $t_p=4000\mu s$, $V_R=100V$ $dv/dt=30V/\mu s$, $di/dt=-20A/\mu s$	125	40		100	μs
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
I_L	Latching current					1000	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125			0.3	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Double side cooled Clamping force 35kN				0.012	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.003	
F_m	Mounting force			30		40	kN
T_{vj}	Junction temperature			-40		125	$^{\circ}C$
T_{stg}	Stored temperature			-40		140	$^{\circ}C$
W_t	Weight				880		g
Outline	KT60cT						

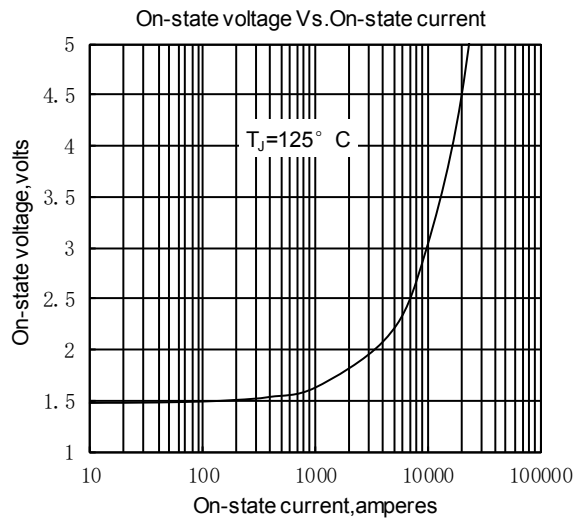


Fig.1

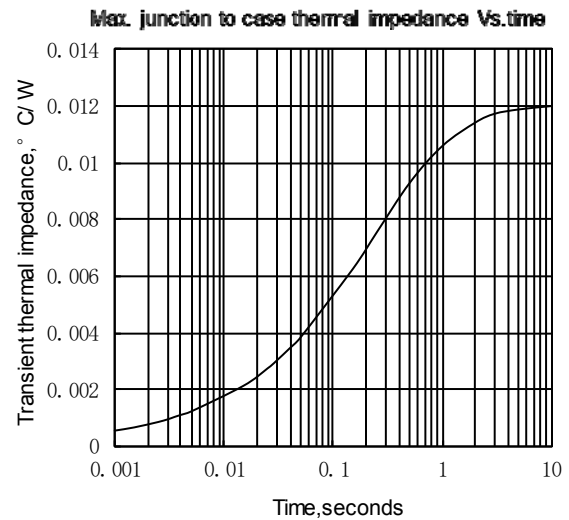


Fig.2

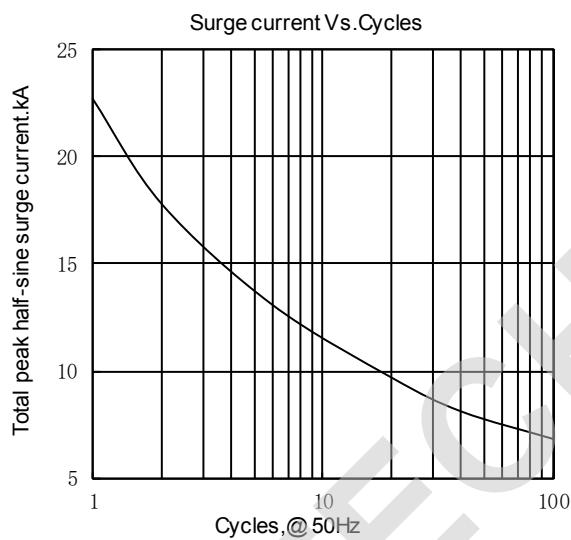


Fig.3

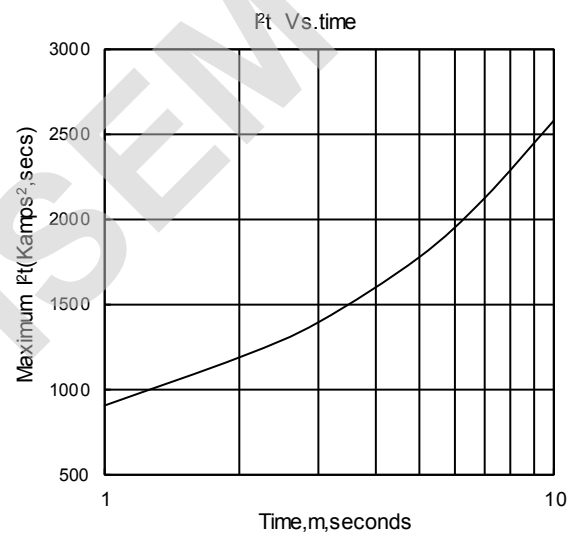


Fig.4

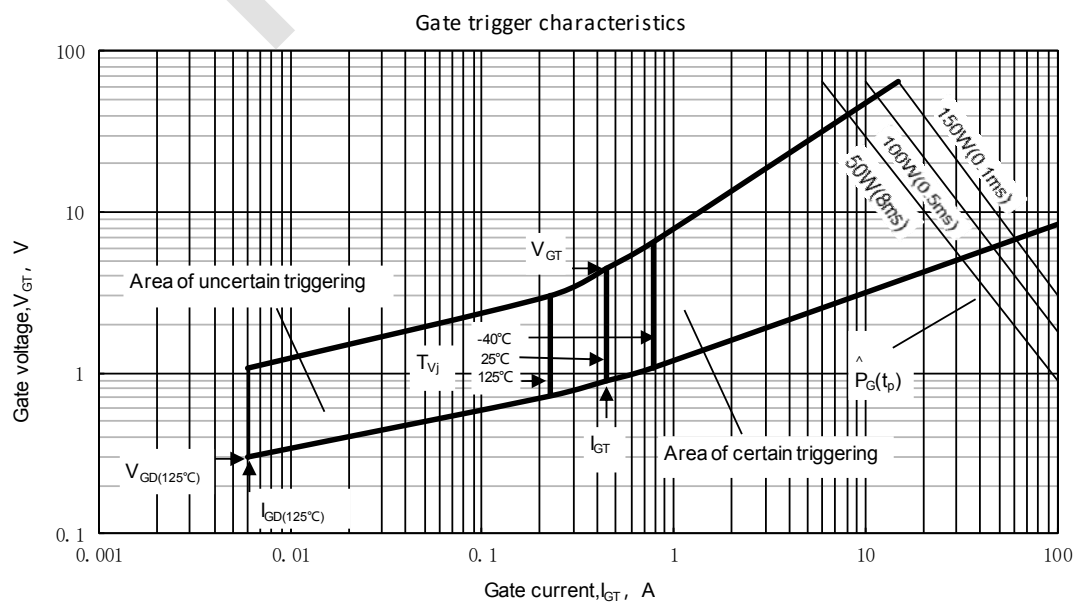
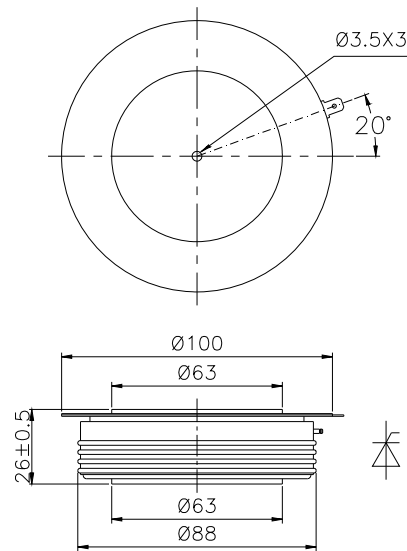


Fig.5

Outline:



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