



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 (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sine wave 50Hz Double side cooled	T _c =55°C	125		2160	A
V _{DRM} / V _{RRM}	Repetitive peak off-state voltage	tp=10ms	125	2000		2500	V
I _{DRM} / I _{RRM}	Repetitive peak current	at V _{DRM} tp=10ms at V _{RRM} tp=10ms	125			160	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			22.7	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}				2576	10 ³ A ² s
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 ≤0.5μs I _{GM} =1.5A Single pulse	125			1200	A/μs
Q _{rr}	Recovery charge	I _{TM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V	125		1500		μC
t _q	Circuit commutated turn-off time	I _{TM} =2000A, tp=4000μs, V _R =100V dv/dt=30V/μs, di/dt=-20A/μs	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	°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	°C
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				880		g
Outline	KT60cT						

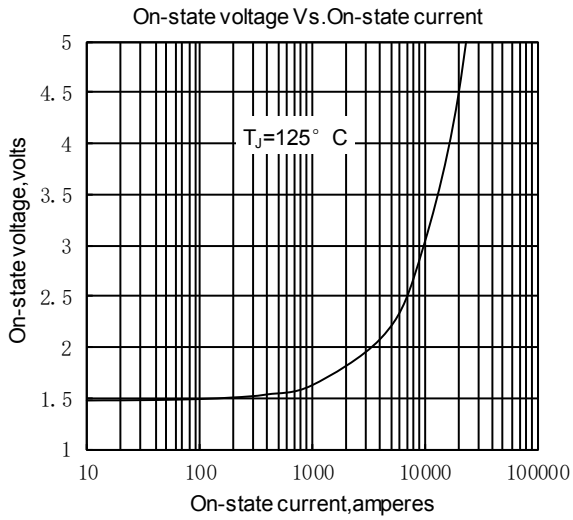


Fig.1

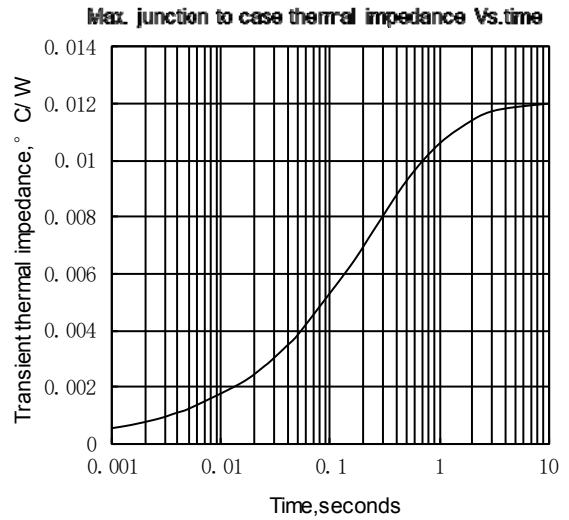


Fig.2

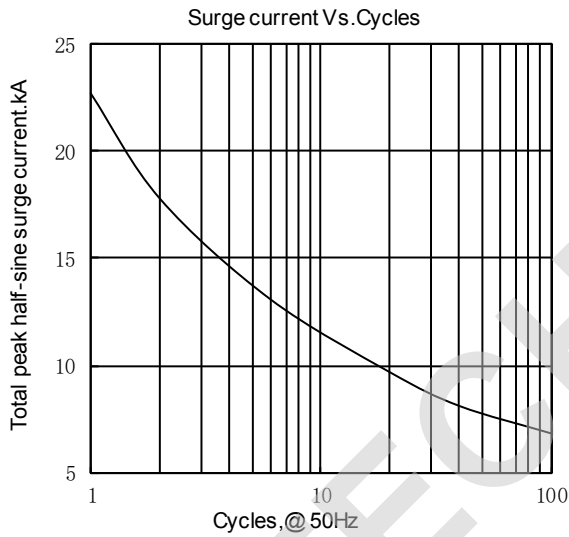


Fig.3

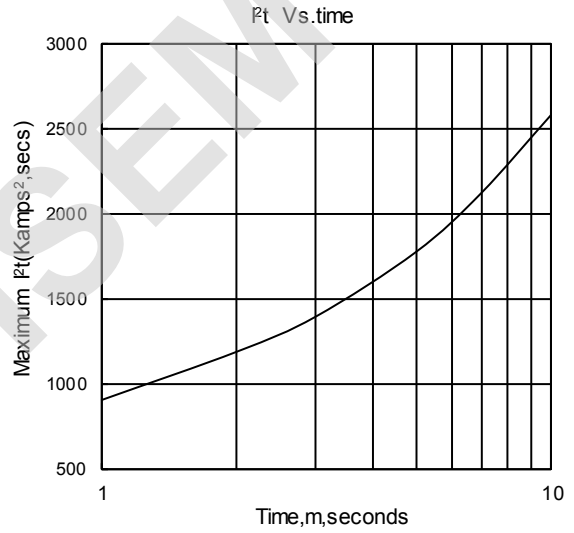


Fig.4

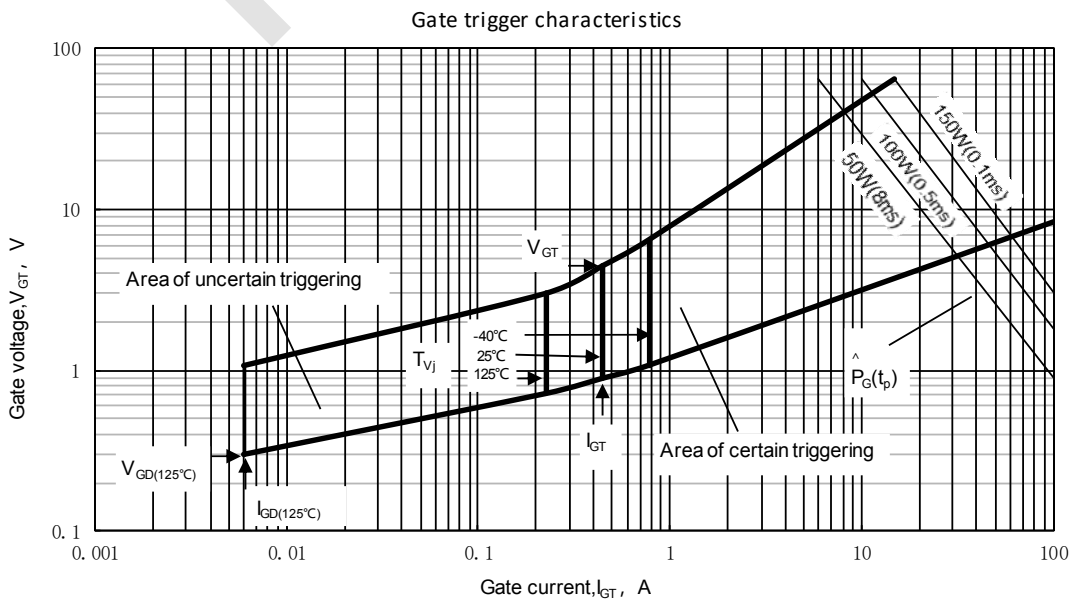
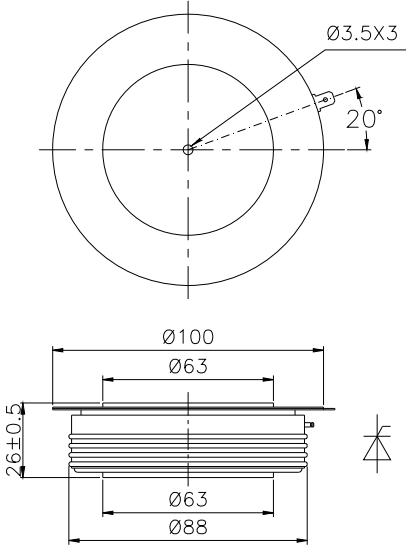


Fig.5

Outline:



TECHSEM reserves the right to change specifications without notice.

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