



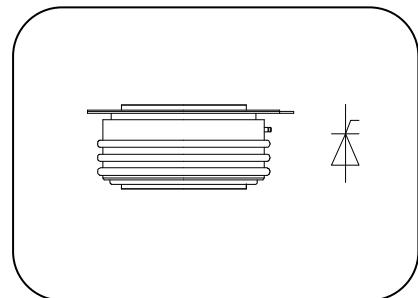
Features

- 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

I_{T(AV)} **1200A**
V_{DRM/V_{RRM}} **1900~3000V**
I_{TSM} **18 kA**
I²t **1620 10³A²S**



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,	125		1200	1530	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	125	1900		3000	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125		100	mA	
I _{TSM}	Surge on-state current	10ms half sine wave	125		18	kA	
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}			1620	A ² s*10 ³	
V _{TO}	Threshold voltage		125		0.97	V	
r _T	On-state slope resistance				0.27	mΩ	
V _{TM}	Peak on-state voltage	I _{TM} =3000A, F=26kN	25		2.40	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} , I _{TM} =(2~3)ITAV, t=5s, Gate pulse t _f ≤0.5μs I _{GM} =1.5A f=50Hz	125		150	A/μs	
Q _{rr}	Recovery charge	I _{TM} =1200A, tp=1000μs, di/dt=-20A/μs, V _R =100V	125		1600	μC	
I _{GT}	Gate trigger current		25	40		300	mA
V _{GT}	Gate trigger voltage	V _A =12V, I _A =1A		0.8		3.0	V
I _H	Holding current			20		300	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	At 180° sine double side cooled			0.018		°C /W
R _{th(c-h)}	Thermal resistance case to heatsink	Clamping force 26.0kN			0.004		
F _m	Mounting force			21		30	kN
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				600		g
Outline		KT60cT					

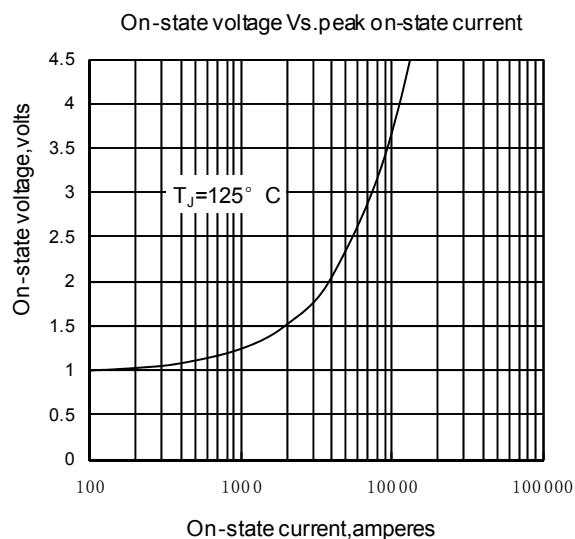


Fig1

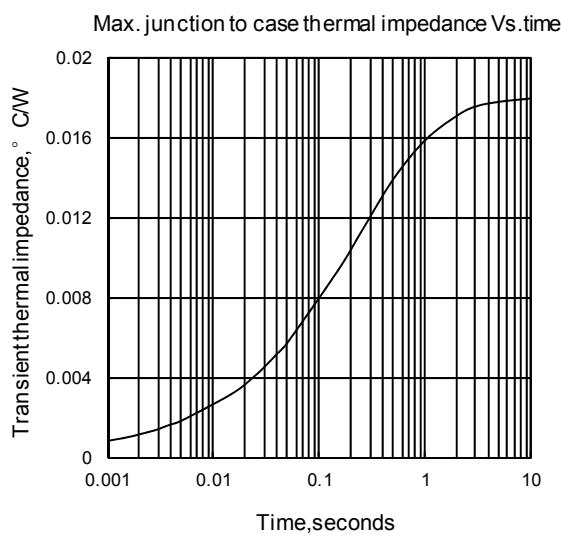


Fig2

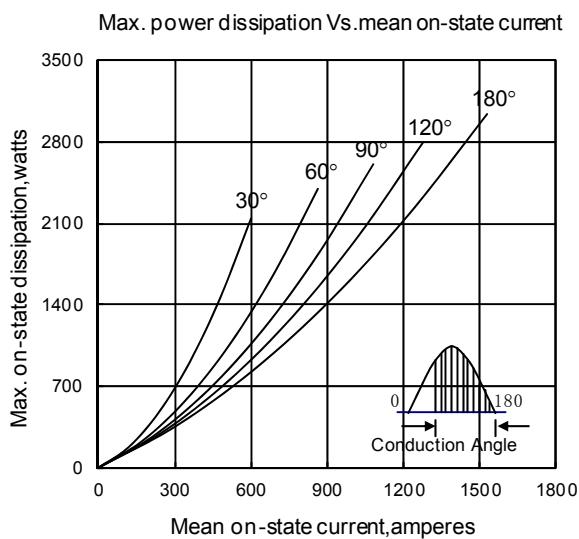


Fig3

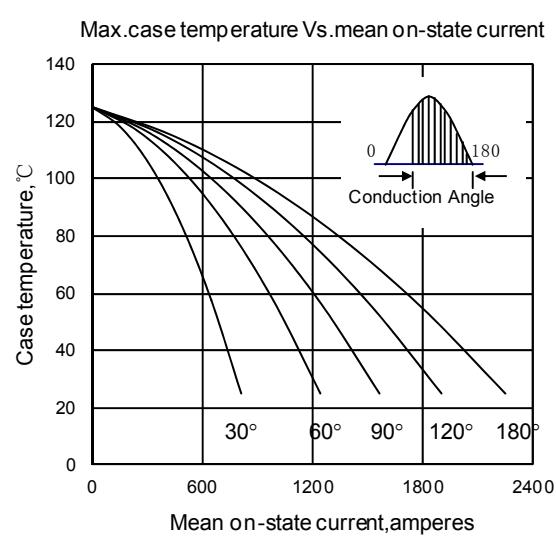


Fig4

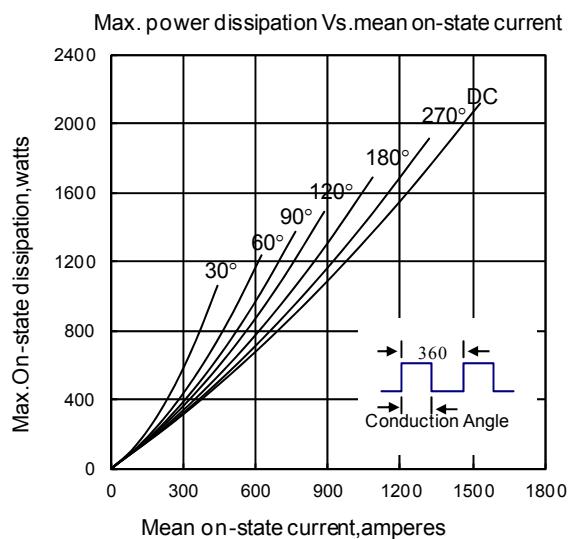


Fig5

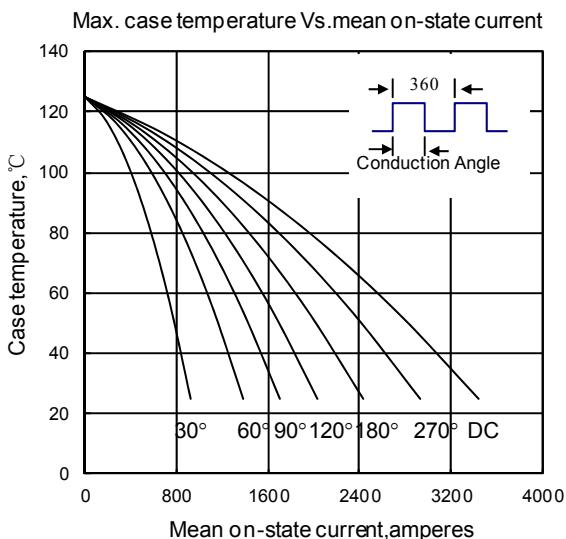


Fig6

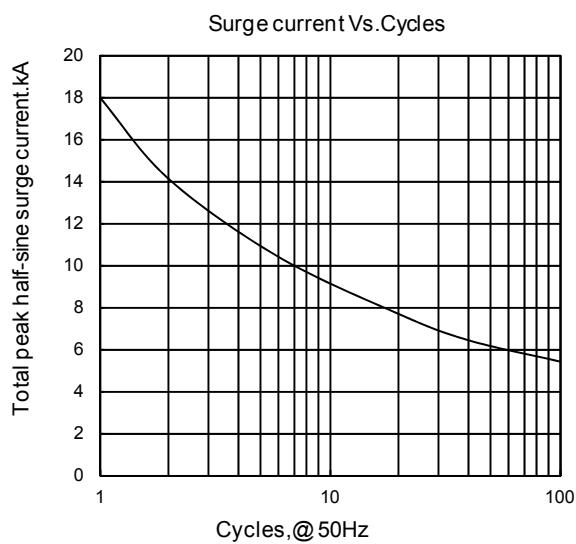


Fig7

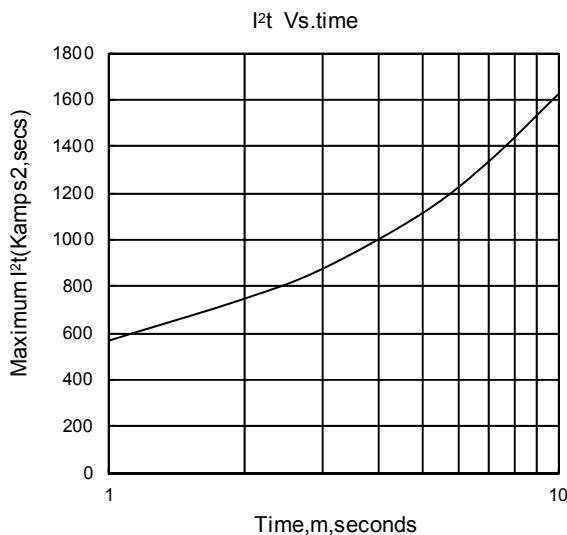


Fig8

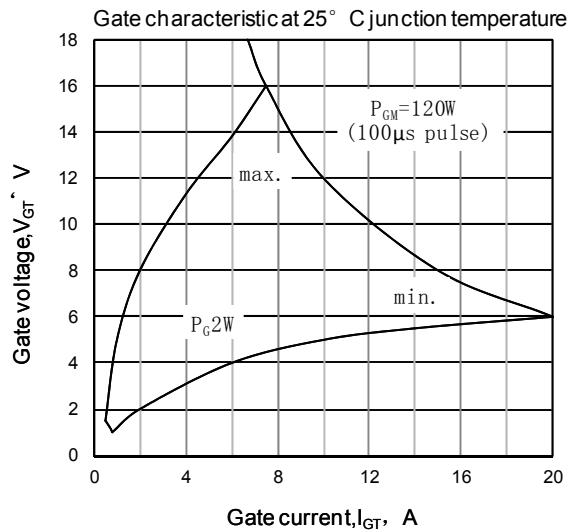


Fig9

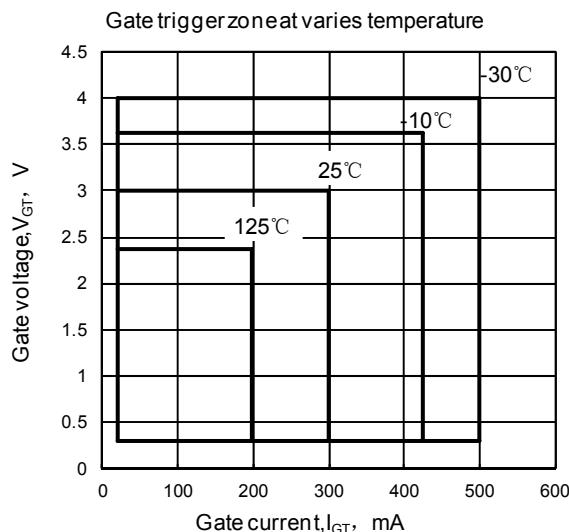


Fig10

Outline:

图10-KT60cT

