



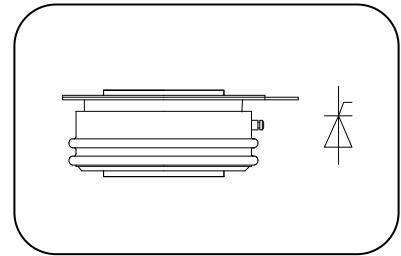
Features

- 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

$I_{T(AV)}$	200A
V_{DRM}/V_{RRM}	1100~1800V
I_{TSM}	7.5 kA
I^2t	281 $10^3 A^2S$



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, $T_C=70^{\circ}C$			200	600	
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10ms$	125	1100		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			30	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=0.6V_{RRM}$	125			7.5	kA
I^2t	I^2t for fusing coordination					281	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.88	V
r_T	On-state slope resistance					0.80	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=600A, F=7.0kN$	25			2.00	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	$V_{DM}=67\%V_{DRM}, ITM=(2\sim 3)ITAV, t=5s,$ Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ $f=50Hz$	125			100	A/μs
Q_{rr}	Recovery charge	$I_{TM}=800A, tp=1000\mu s, di/dt=-20A/\mu s,$ $V_R = 100V$	125		1030		μC
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$	25	35		250	mA
V_{GT}	Gate trigger voltage			0.8		2.5	V
I_H	Holding current			20		200	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=0.67V_{DRM}$	125			0.3	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 7.0kN				0.040	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.010	
m	Mounting force			5.3		10	kN
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight			85/195			g
Outline	KT25aT/KT36cT						

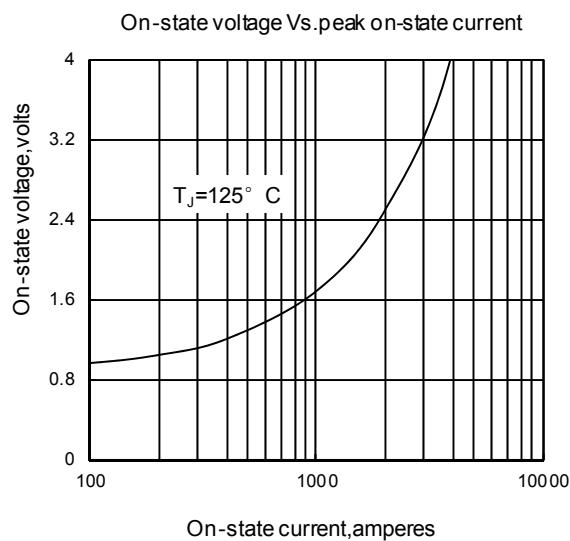


Fig1

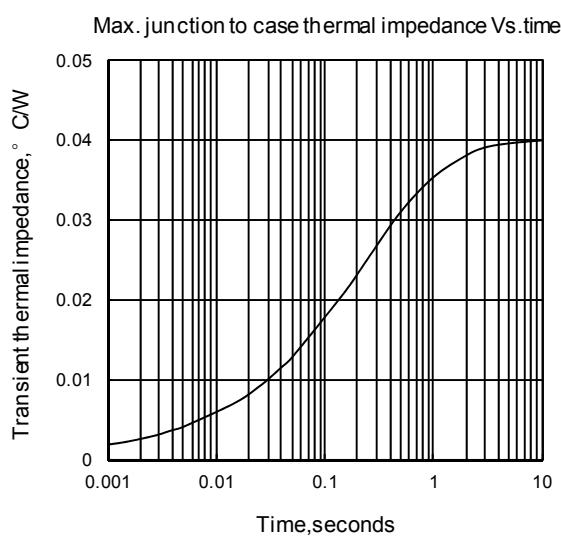


Fig2

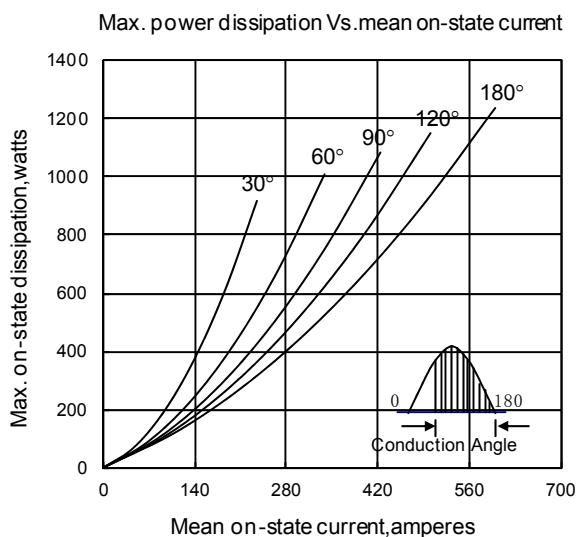


Fig3

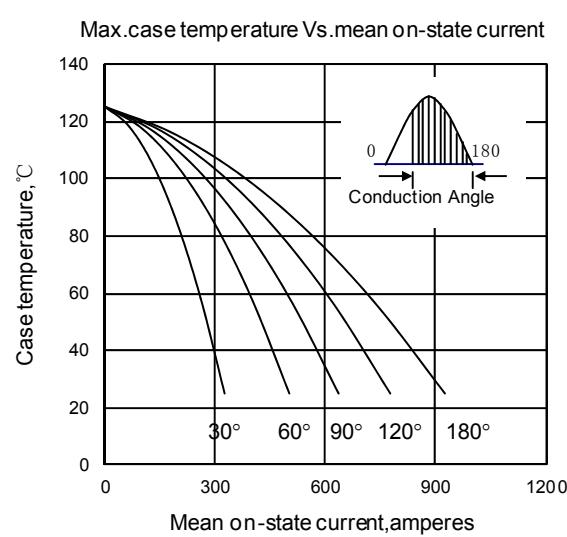


Fig4

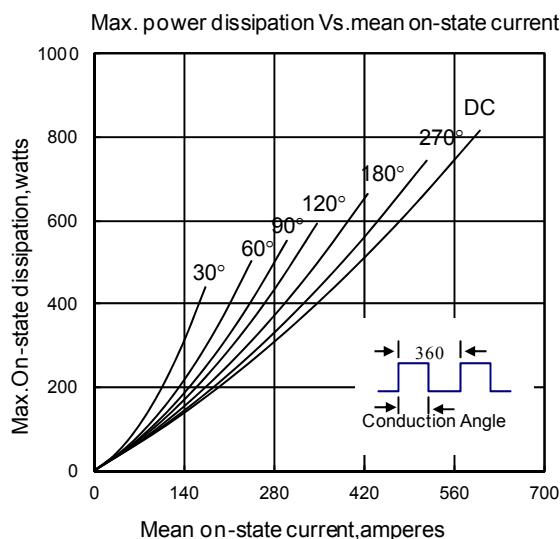


Fig5

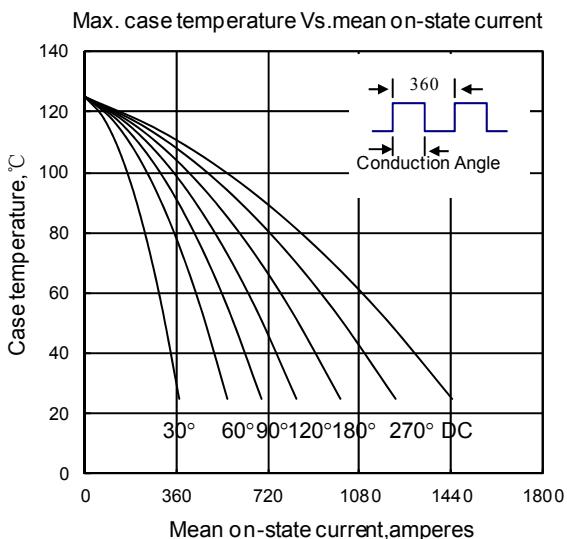


Fig6

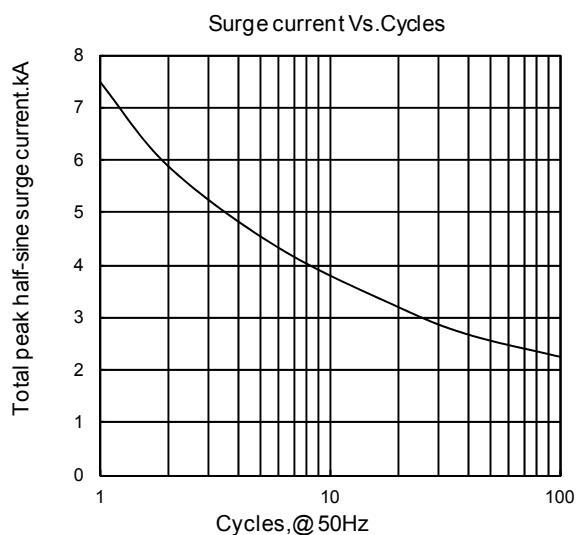


Fig 7

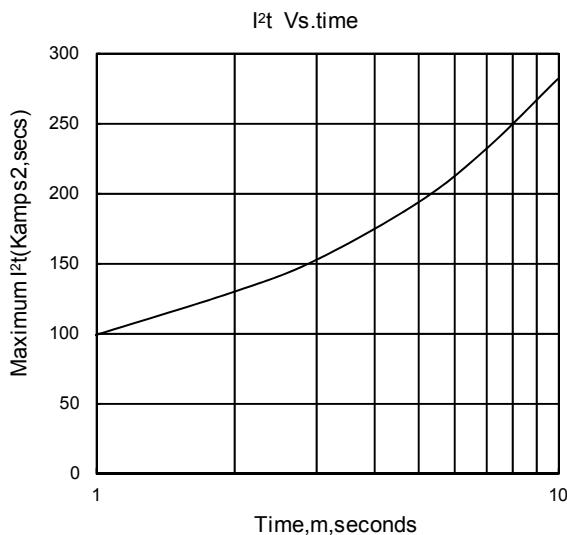


Fig 8

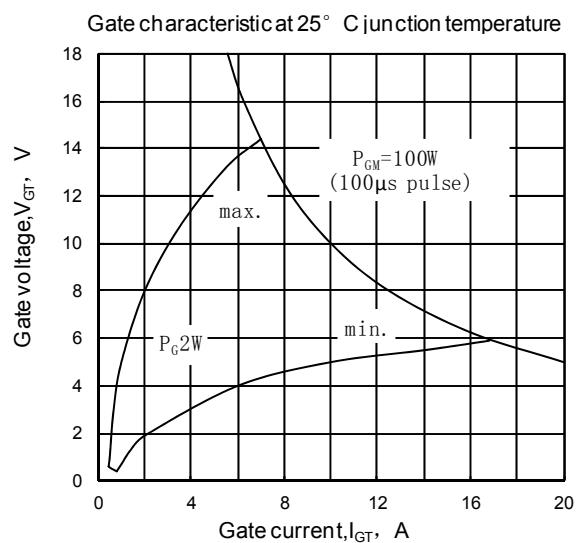


Fig 9

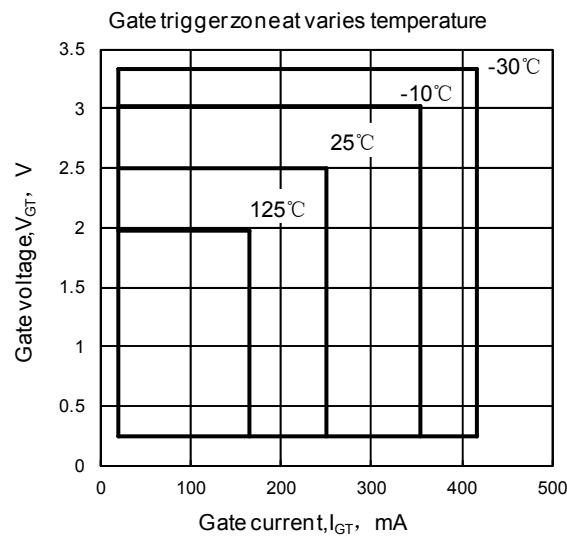


Fig 10

Outline:

图2-KT30aT

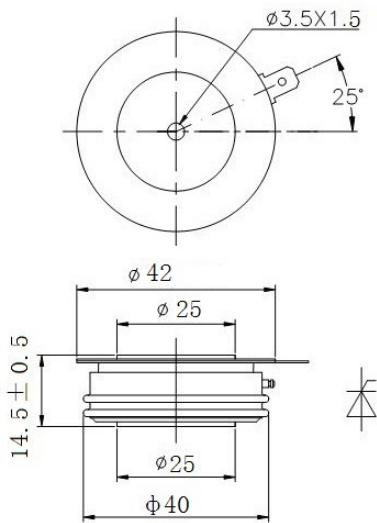


图3-KT36cT

