

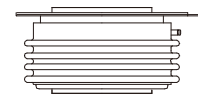
Features

- 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

$I_{T(AV)}$	1600A
V_{DRM}/V_{RRM}	400~1000V
I_{TSM}	20 KA
I^2t	2000 10^3A^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 $T_{hs}=68^{\circ}C$	125			1600	A
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled $T_{hs}=55^{\circ}C$	125			1835	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} $t_p=10ms$ V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 100V$	125	400		1000	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM} = V_{DRM}$ $V_{RM} = V_{RRM}$	125			80	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			20	KA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				2000	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.89	V
r_T	On-state slop resistance					0.15	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=3000A, F=24KN$	25			1.80	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67 V_{DRM}$	125			300	V/μs
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\% V_{DRM}$ to 1500A, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ Repetitive	125			200	A/μs
I_{rm}	Reverse recovery current	$I_{TM}=1500A, t_p=1000\mu s,$ $di/dt=-20A/\mu s,$ $V_R=50V$	125				A
t_{rr}	Reverse recovery time						μs
Q_{rr}	Recovery charge						μC
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$	25	40		300	mA
V_{GT}	Gate trigger voltage			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
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180° sine double side cooled Clamping force 24KN				0.024	$^{\circ}C/W$
F_m	Mounting force			19		26	KN
T_{stg}	Stored temperature			-40		140	$^{\circ}C$
W_t	Weight				470		g
Outline	KT50cT						

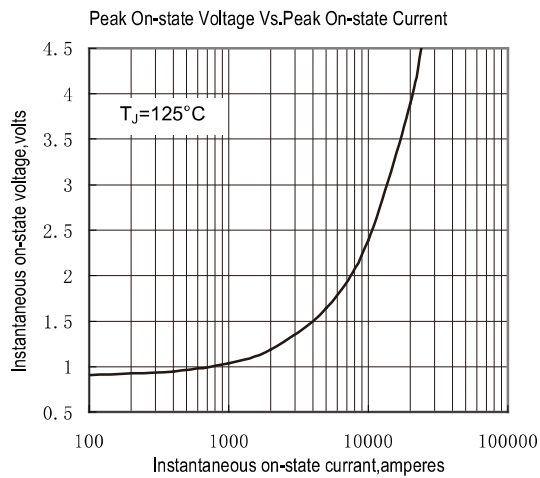


Fig.1

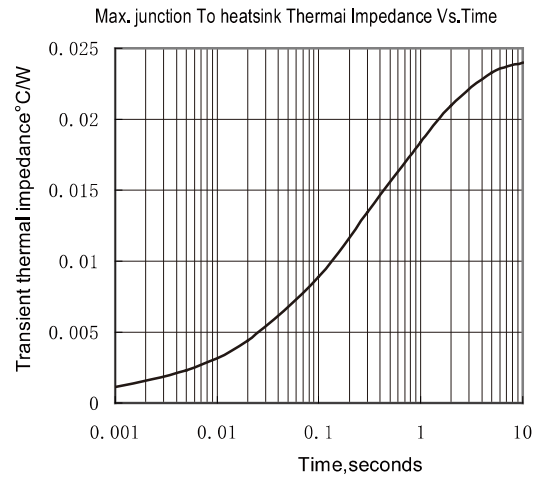


Fig.2

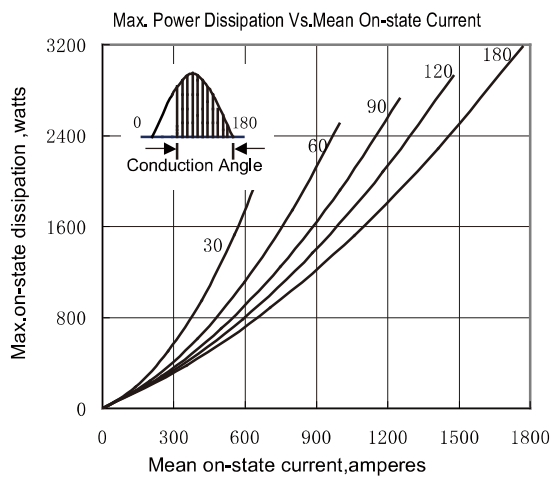


Fig.3

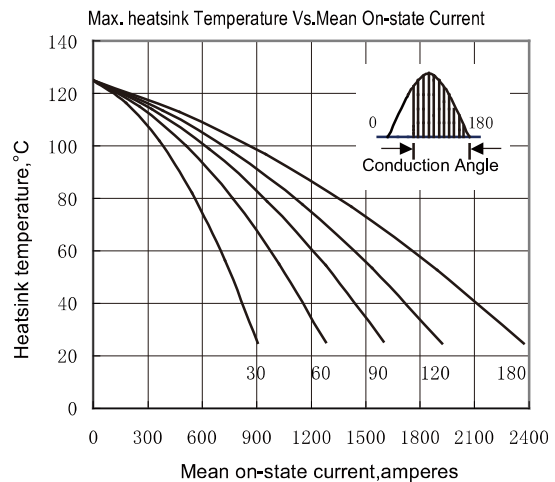


Fig.4

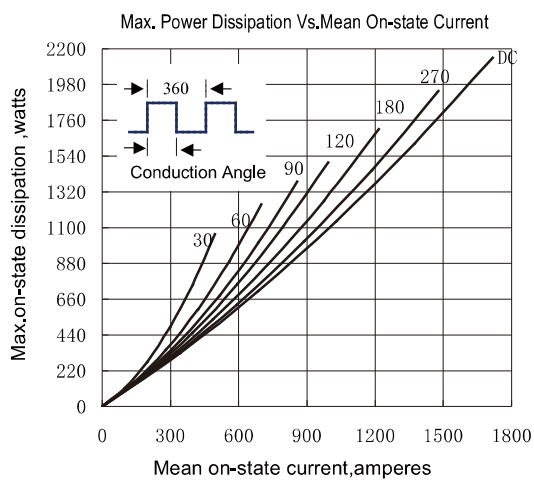


Fig.5

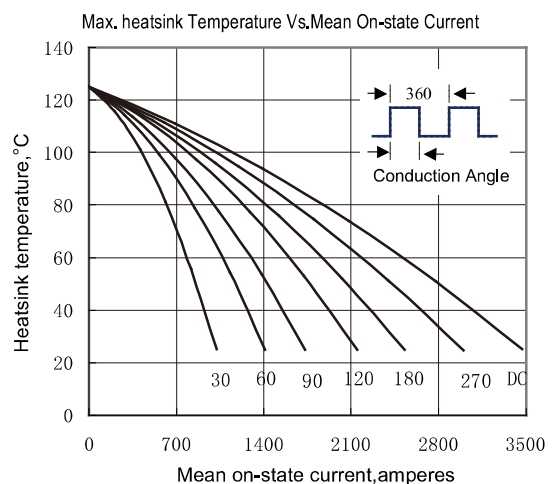


Fig.6

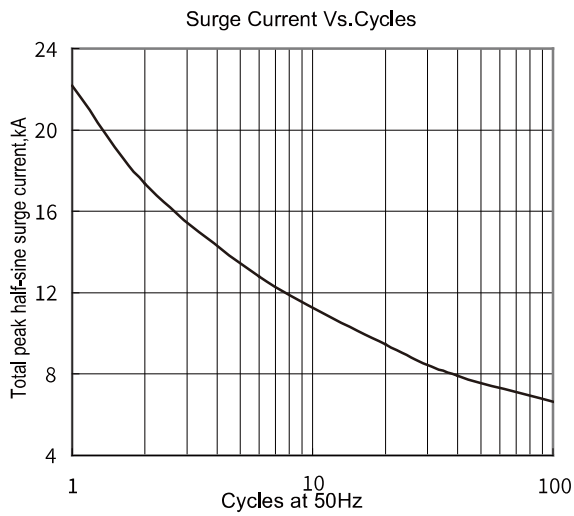


Fig.7

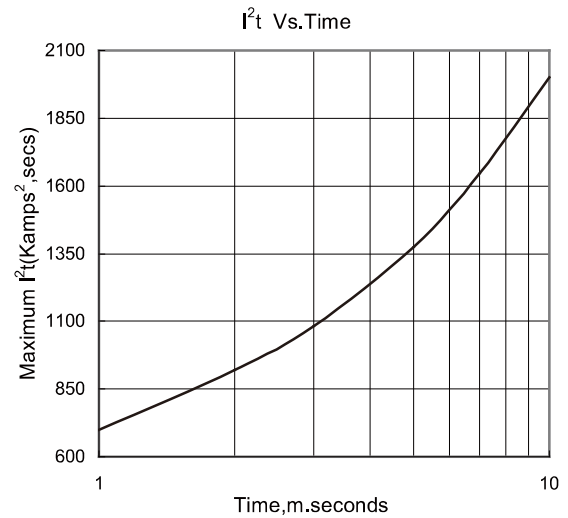


Fig.8

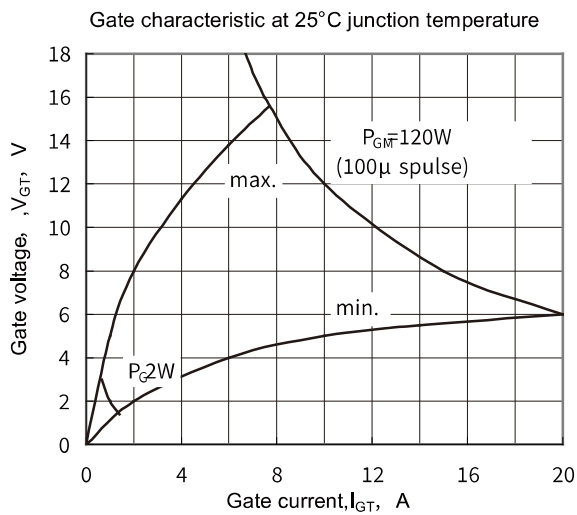


Fig.9

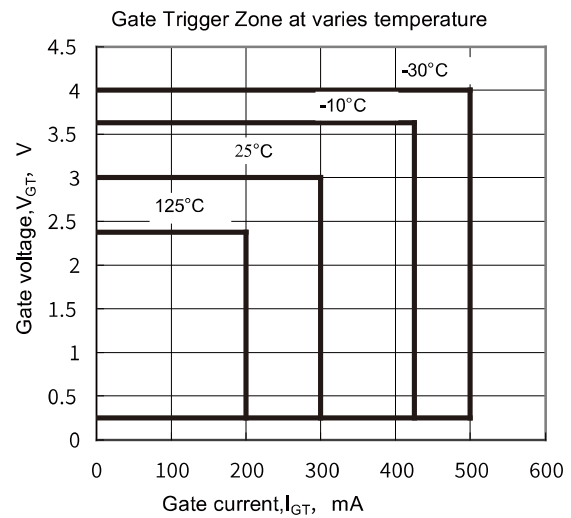


Fig.10

Outline:

