

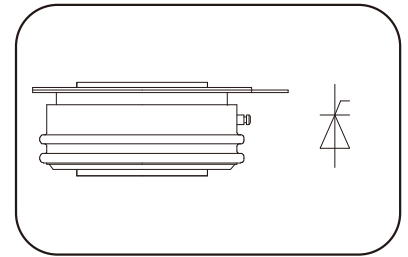
Features

- 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

$I_{T(AV)}$	1250A
V_{DRM} / V_{RRM}	3100~4200V
I_{TSM}	16 KA
I^2t	1280 10 ³ A ² S



Symbol	Characteristic	Test Conditions	$T_j(^{\circ}\text{C})$	Value			Unit
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled $T_{hs}=70^{\circ}\text{C}$	125			1250	A
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled $T_{hs}=55^{\circ}\text{C}$	125			1611	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$	125	3100		4200	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM} = V_{DRM}$ $V_{RM} = V_{RRM}$	125			120	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			16	KA
I^2t	I^2t for fusing coordination	$V_R = 0.6V_{RRM}$				1280	A ² s*10 ³
V_{TO}	Threshold voltage		125			1.17	V
r_T	On-state slop resistance					0.35	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=3000A$, F=32KN	25			2.80	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67 V_{DRM}$	125			500	V/μs
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\% V_{DRM}$ to 2000A, Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive	125			200	A/μs
I_{rm}	Reverse recovery current	$I_{TM}=1500A$, tp=1000 μs, di/dt=-20A/μs, $V_R=50V$	125			170	A
t_{rr}	Reverse recovery time					20	μs
Q_{rr}	Recovery charge					1700	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 32KN				0.017	°C/W
F_m	Mounting force			27		34	KN
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight				850		g
Outline	KT60cT65						

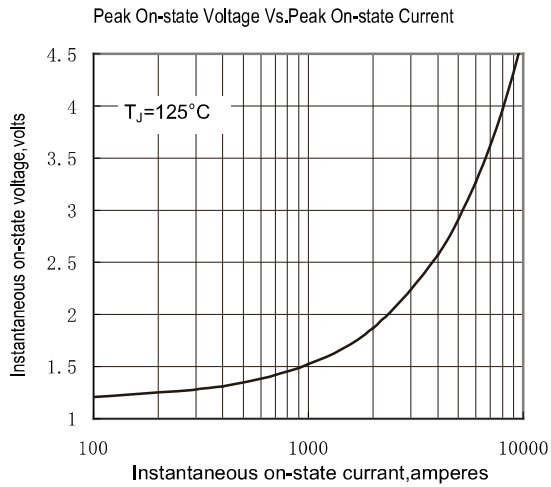


Fig.1

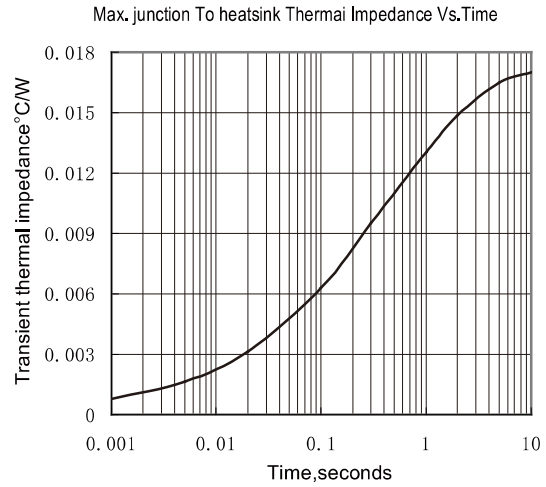


Fig.2

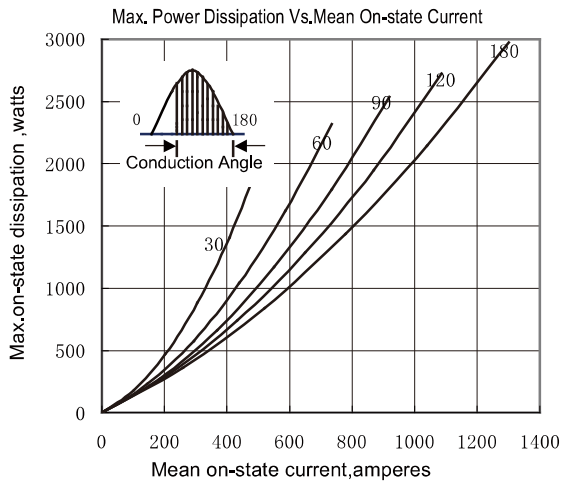


Fig.3

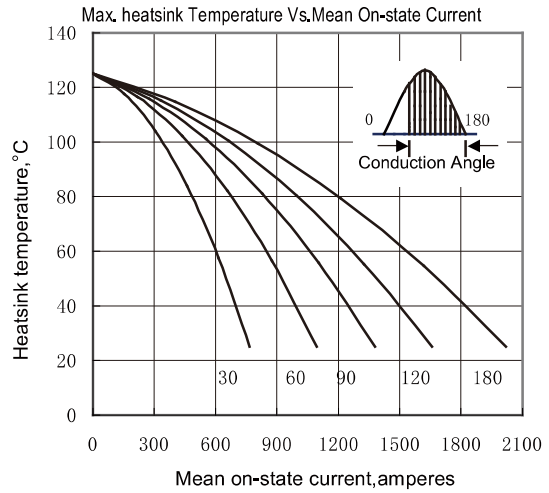


Fig.4

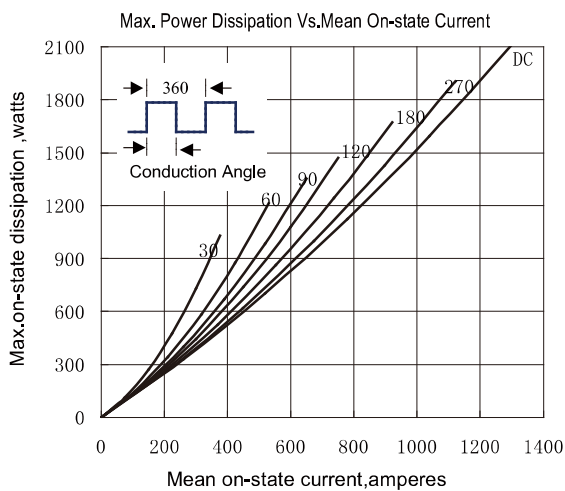


Fig.5

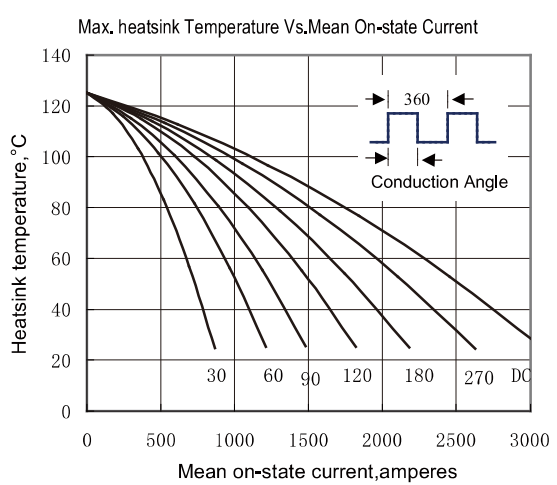


Fig.6

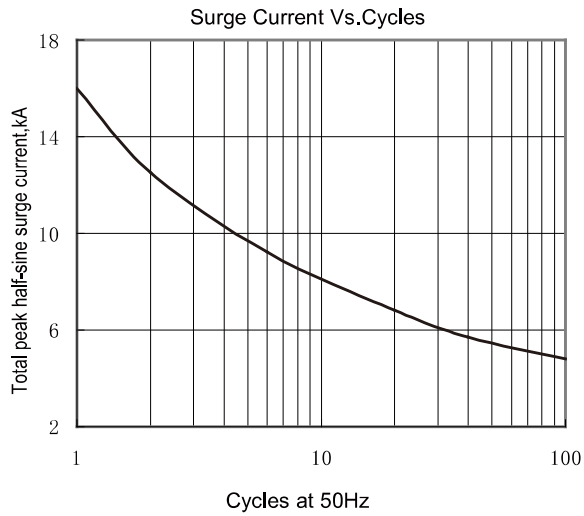


Fig.7

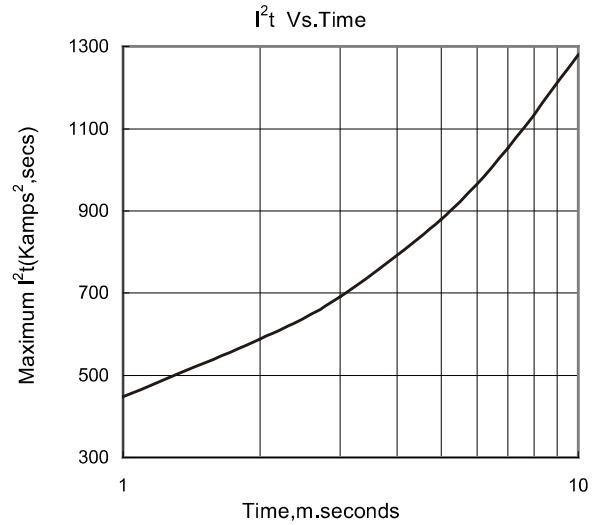


Fig.8

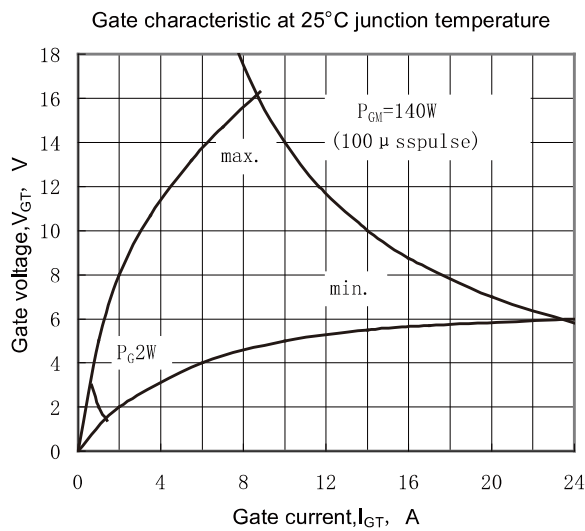


Fig.9

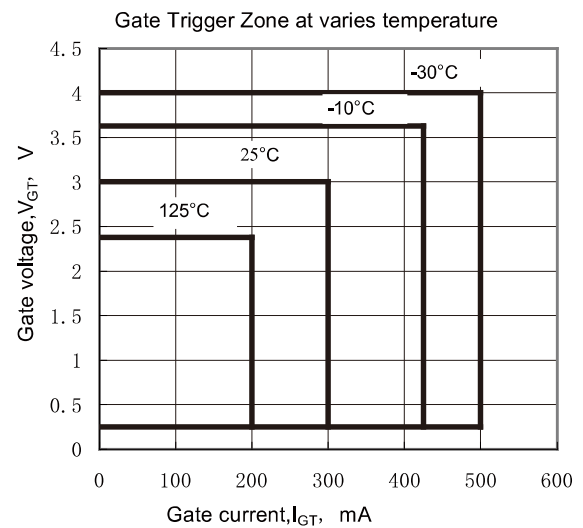


Fig.10

Outline:

