

Features

- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

$I_{T(AV)}$ 1150 A
 V_{DRM}/V_{RRM} 5600-6500V
 I_{TSM} 18 kA
 I^2t 1620 $10^3 A^2s$

Typical Applications

- AC controllers
- DC and AC motor control
- Controlled rectifiers



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, $T_c=55^{\circ}C$	125			1450	A
						1150	
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	5600		6500	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM}=V_{DRM}$ $V_{RM}=V_{RRM}$	125			400	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=0.6V_{RRM}$	125			18	kA
I^2t	I^2T for fusing coordination					1620	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			1.21	V
r_T	On-state slop resistance					0.70	$m\Omega$
V_{TM}	Peak on-state voltage	$I_{TM}=1500A$, F=32kN	125			2.35	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$	125			2000	V/ μ s
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ to 2000A, Gate pulse tr $\leq 0.5\mu s$ $I_{GM}=1.5A$	125			200	A/ μ s
Q_{fr}	Recovery charge	$I_{TM}=2000A$, tp=2000 μ s, $di/dt=-5A/\mu s$, $V_R=50V$	125		3000		μC
I_{GT}	Gate trigger current	VA=12V, IA=1A	25	40		300	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			25		200	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 Clamping force 32.0kN				0.013	$^{\circ}C / W$
$R_{th(j-h)}$	Thermal resistance case to heatsink					0.003	$^{\circ}C / W$
m	Mounting force			27	32	34	kN
T_{stg}	Stored temperature			-40		140	$^{\circ}C$
W_t	Weight				820		g
Outline		KT60cT65					

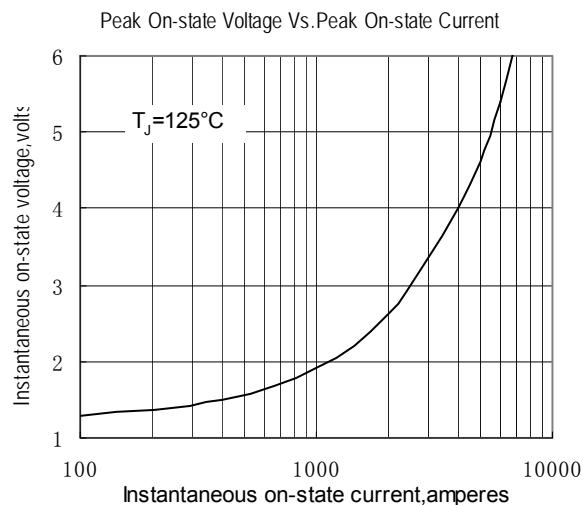


Fig.1

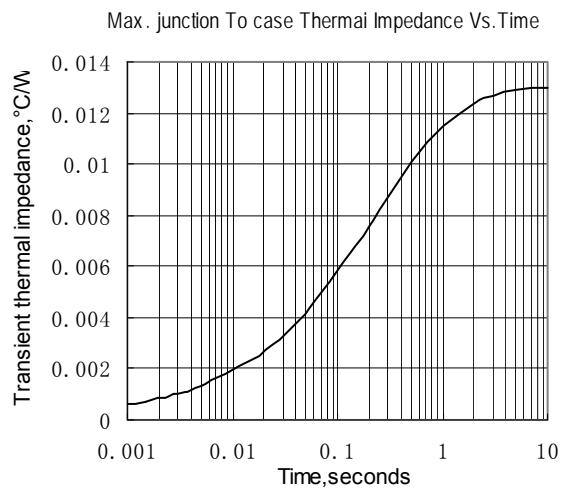


Fig.2

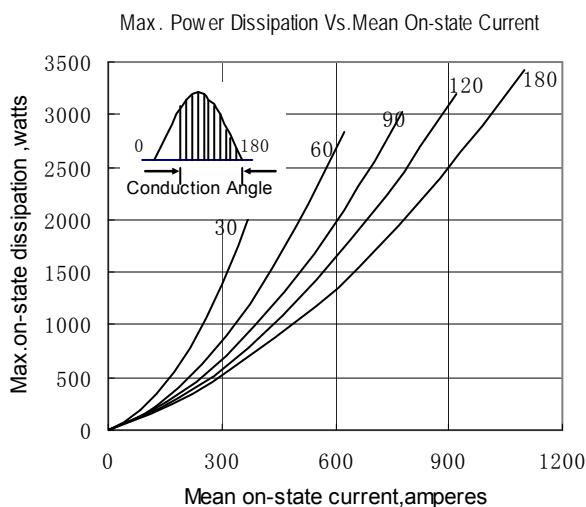


Fig.3

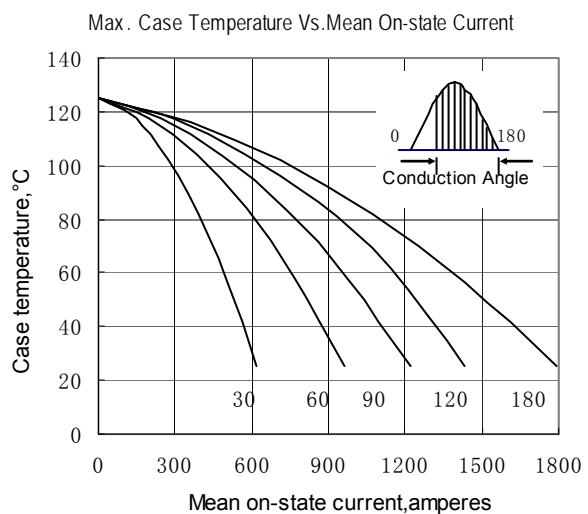


Fig.4

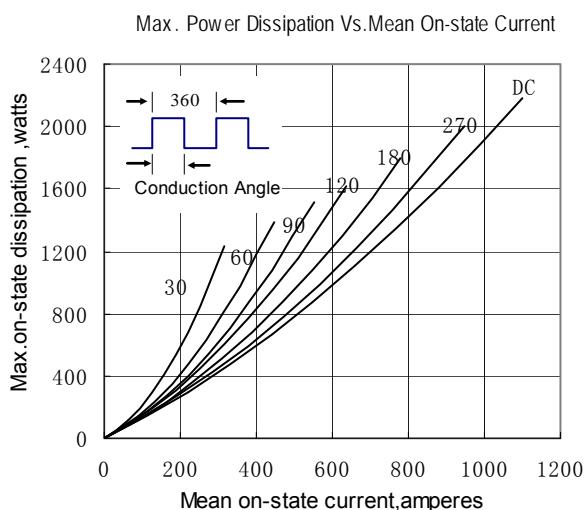


Fig.5

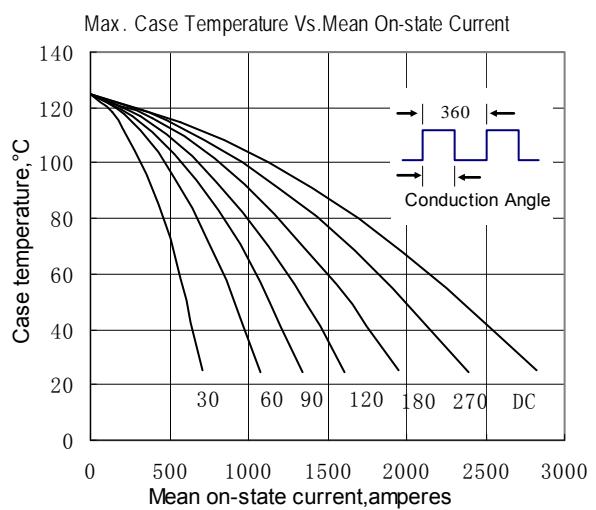


Fig.6

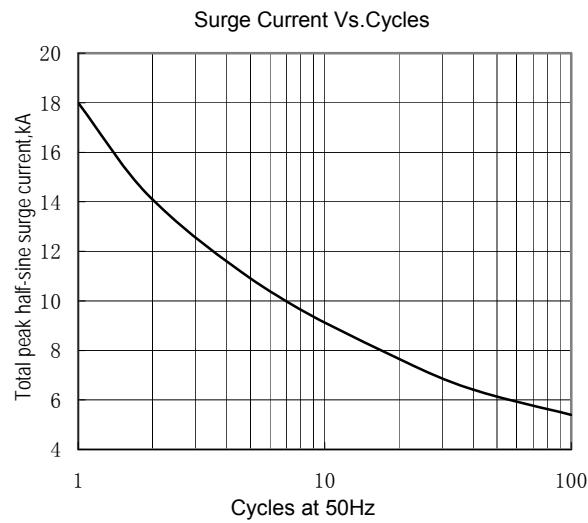


Fig.7

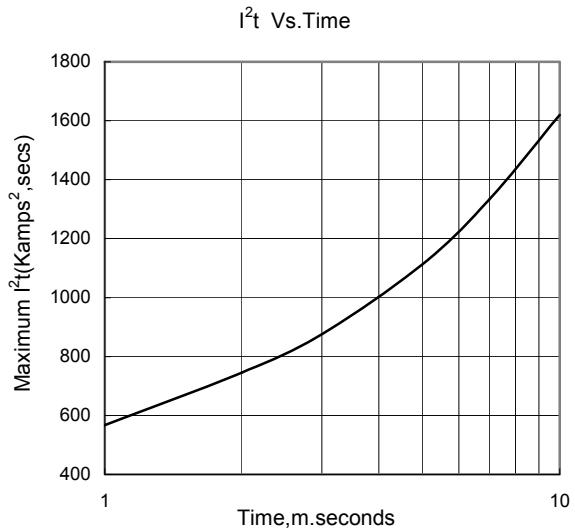


Fig.8

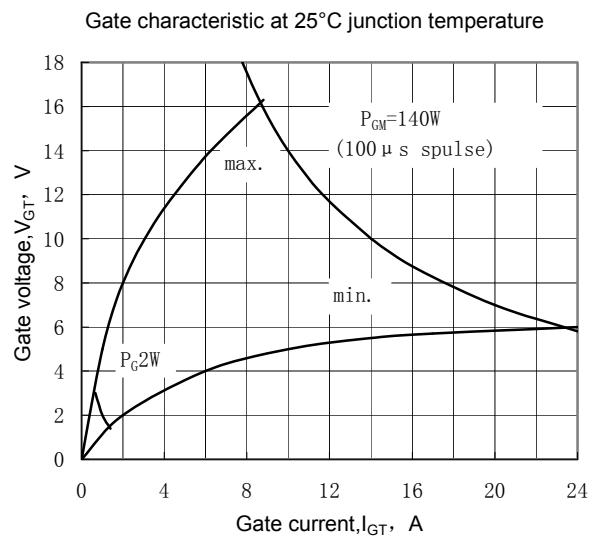


Fig.9

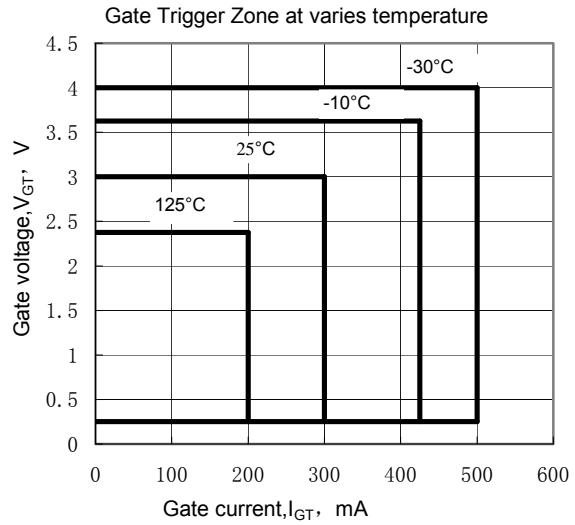


Fig.10

Outline:

