

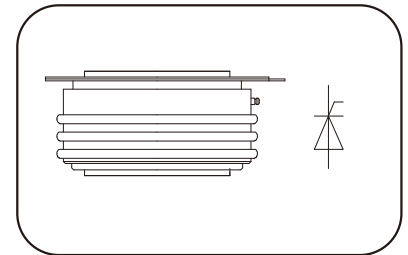
**Features**

- 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

$I_{T(AV)}$	1300A
$V_{DRM}/V_{RRM}$	5600~6500V
$I_{TSM}$	16 KA
$I^2t$	1280 10 <sup>3</sup> A <sup>2</sup> S



Symbol	Characteristic	Test Conditions	T <sub>j</sub> (°C)	Value			Unit
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled T <sub>hs</sub> =70°C	125			1300	A
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled T <sub>hs</sub> =55°C	125			1648	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	5600		6500	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	$V_{DM}=V_{DRM}$ $V_{RM}=V_{RRM}$	125			200	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 <sup>2</sup> s*10 <sup>3</sup>
$V_{TO}$	Threshold voltage		125			1.21	V
$r_T$	On-state slop resistance					0.45	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM}=1500A, F=32KN$	25			2.70	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 pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ Repetitive	125			150	A/μs
$I_{rm}$	Reverse recovery current	$I_{TM}=1500A, tp=1000 \mu s,$ $di/dt=-20A/\mu s,$ $V_R=50V$	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		250	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				0.014	°C/W
$F_m$	Mounting force			27		34	KN
$T_{stg}$	Stored temperature			-40		140	°C
$W_t$	Weight				850		g
Outline	KT60dT65						

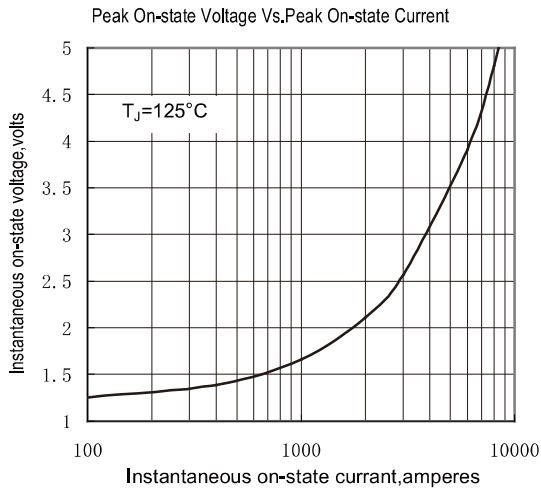


Fig.1

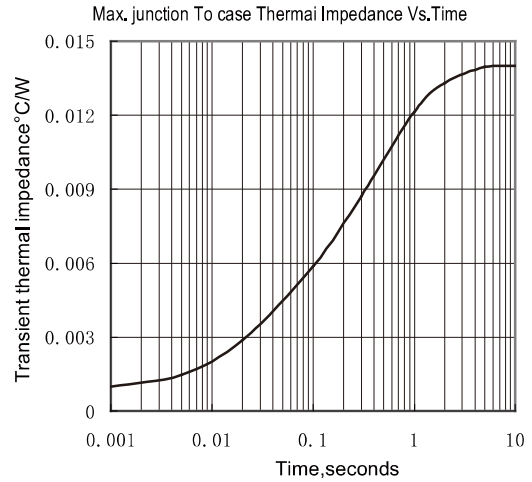


Fig.2

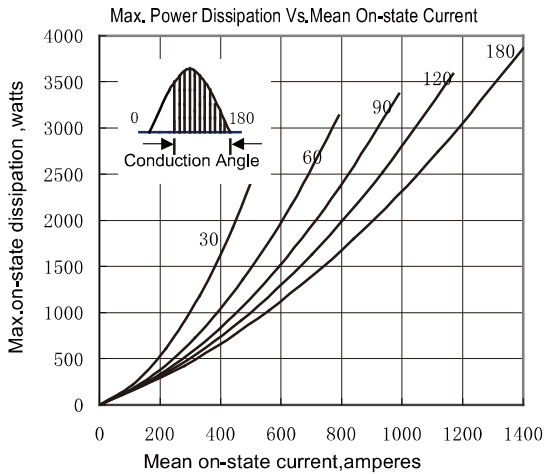


Fig.3

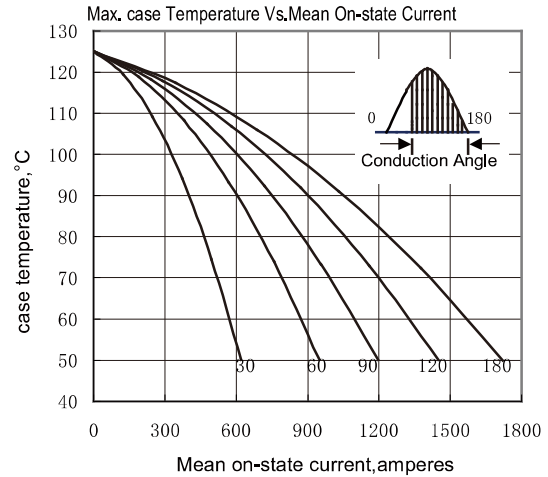


Fig.4

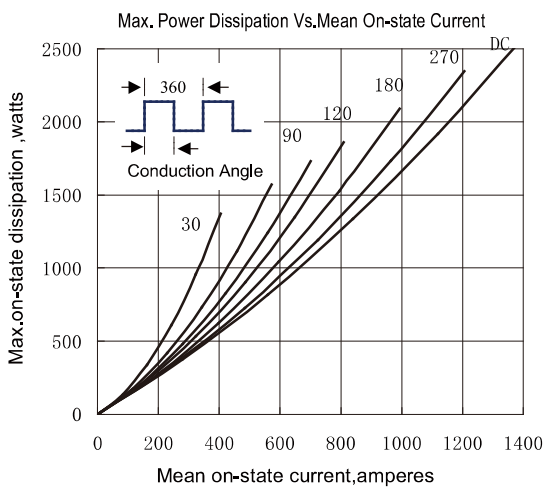


Fig.5

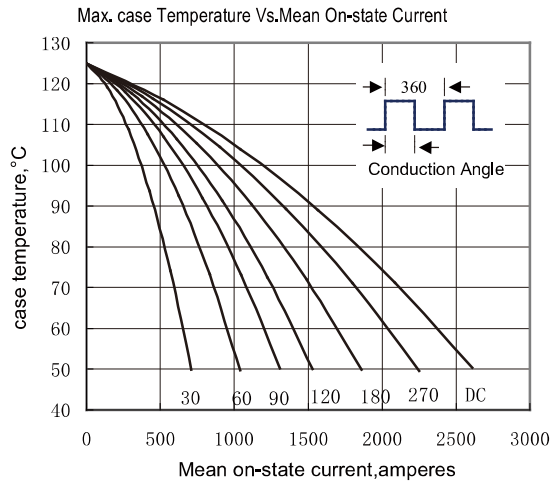


Fig.6

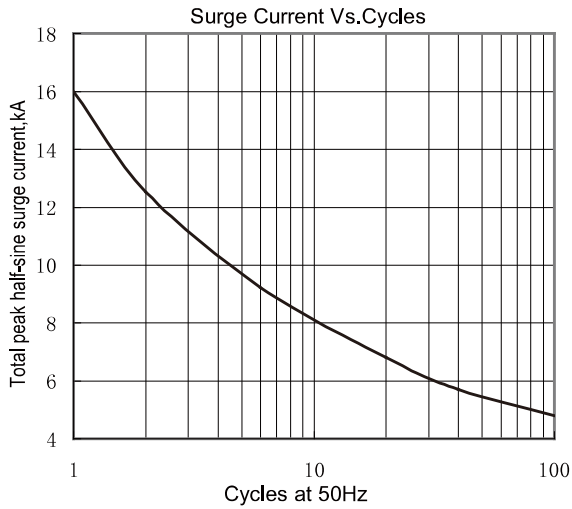


Fig.7

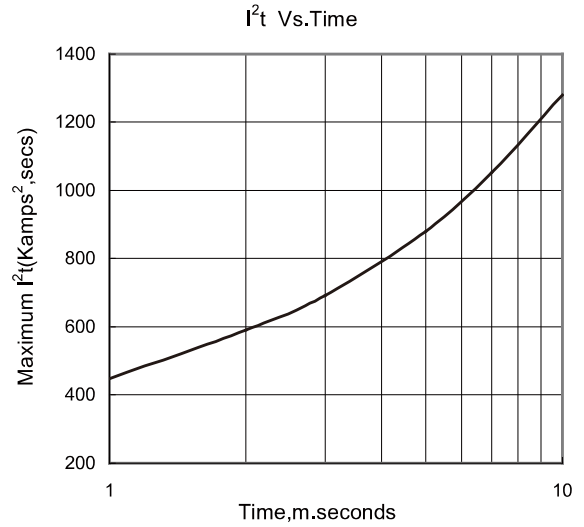


Fig.8

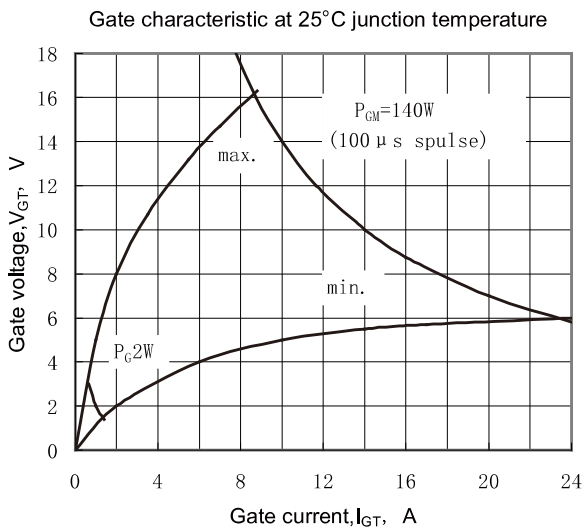


Fig.9

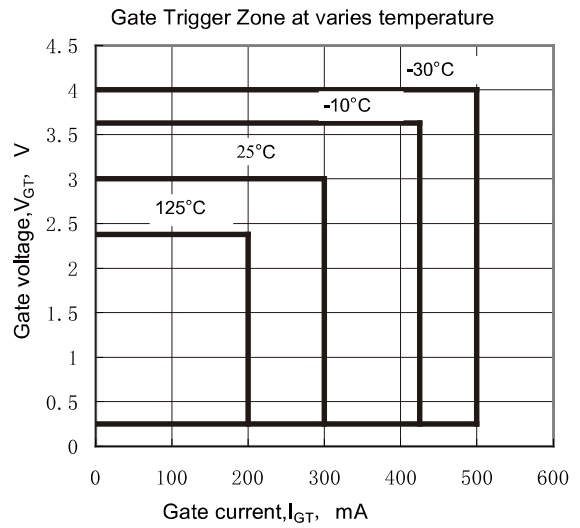


Fig.10

**Outline:**

