



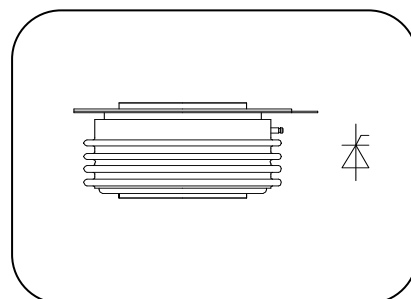
Features:

- 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

$I_{T(AV)}$ **1000A**
 V_{DRM}/V_{RRM} **1100~1800V**
 I_{TSM} **24 kA**
 I^2t **2880 10³A²S**



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 $T_C=70^{\circ}C$	125		1000	1540	A
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			60	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			24	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				2880	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.91	V
r_T	On-state slope resistance					0.23	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=3000A$, $F=24kN$	25			2.10	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	$V_{DM}=67\%V_{DRM}$, $I_{TM}=(2\sim3)I_{TAV}$, $t=5s$, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ $f=50Hz$	125			100	A/μs
Q_{rr}	Recovery charge	$I_{TM}=1000A$, $t_p=1000\mu s$, $di/dt=-20A/\mu s$, $V_R=100V$	125		1500		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
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN				0.020	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.005	
F_m	Mounting force			19		26	kN
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight				470		g
Outline	KT55cT						

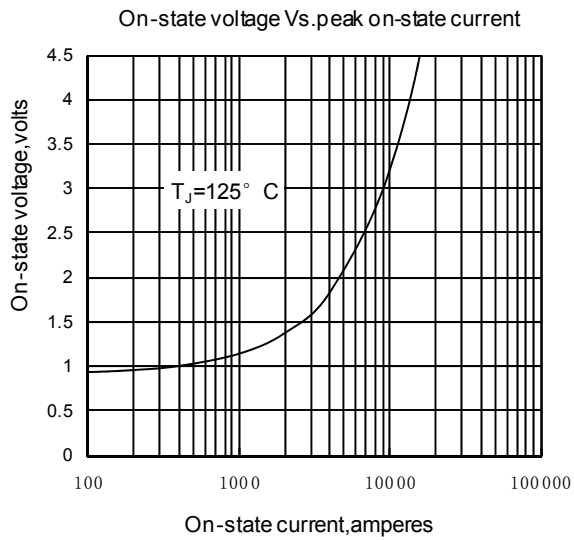


Fig1

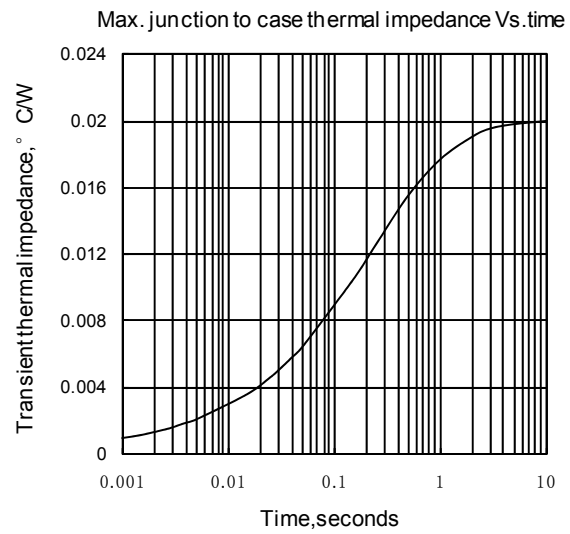


Fig2

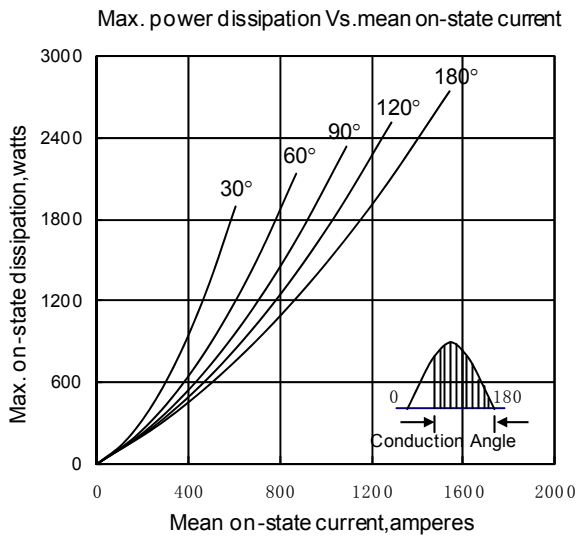


Fig3

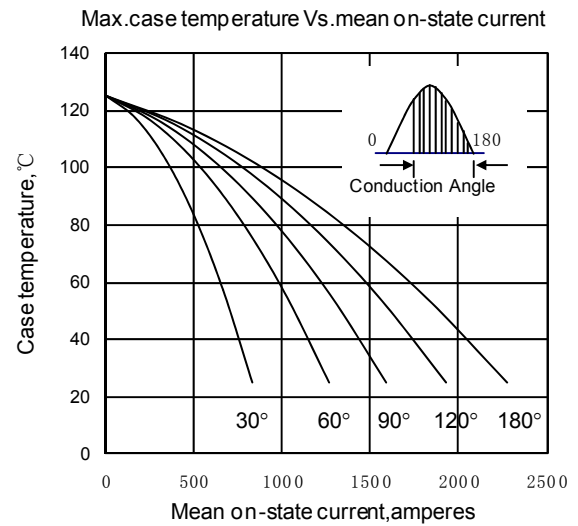


Fig4

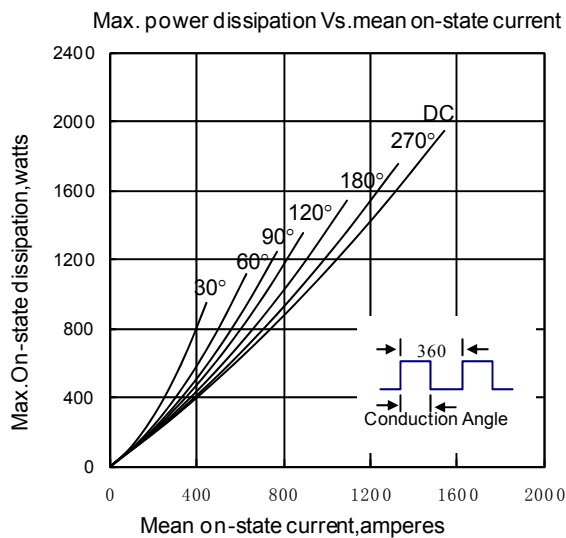


Fig5

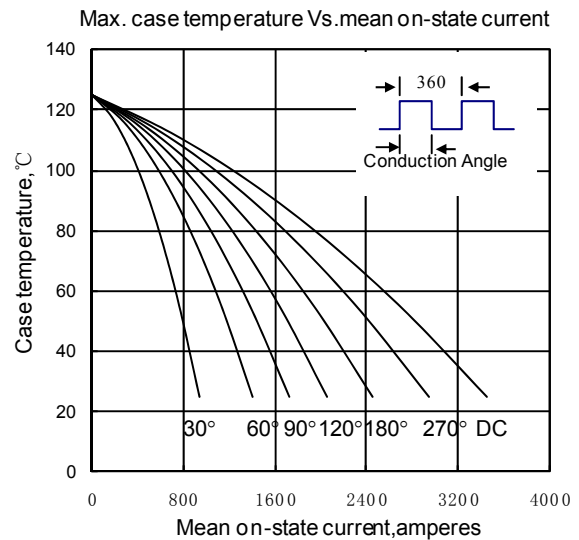


Fig6

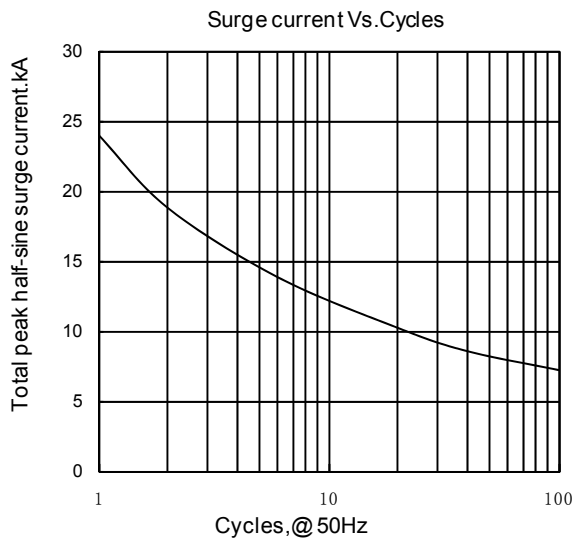


Fig7

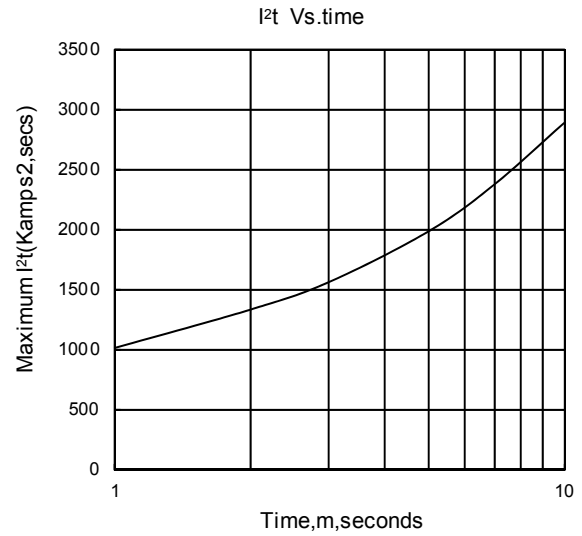


Fig8

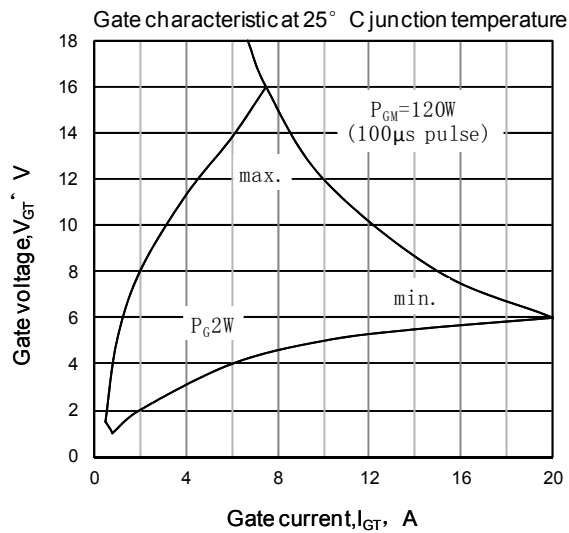


Fig9

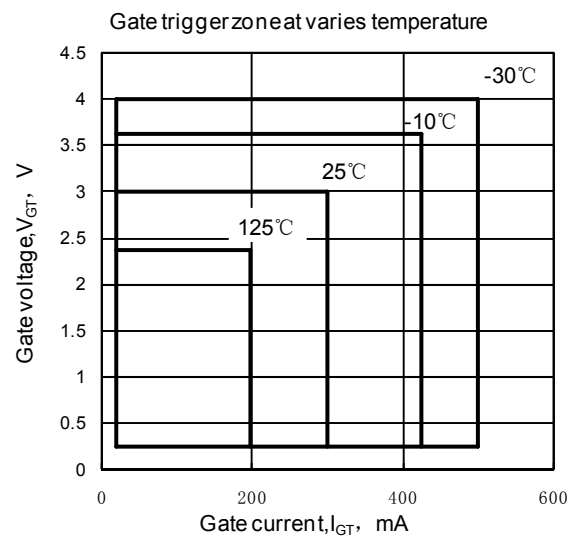


Fig10

Outline:

图8-KT55cT

