



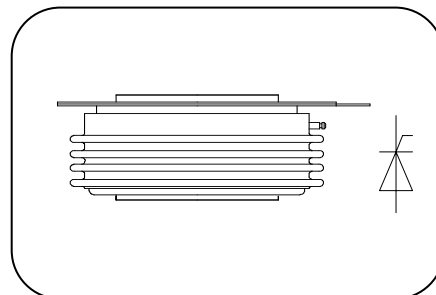
Features

- 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

$I_{T(AV)}$ **4000 A**
 V_{DRM}/V_{RRM} **1900-3000V**
 I_{TSM} **65 kA**
 I^2t **21125 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		4000	5290	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	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM}=V_{DRM}$ $V_{RM}=V_{RRM}$	125			250	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			65	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				21125	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.91	V
r_T	On-state slop resistance					0.09	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=6000A$, $F=90kN$	25			2.1	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	$V_{DM}=67\%V_{DRM}$ to 4000A, Gate pulse $t_r\leq 0.5\mu s$ $I_{GM}=1.5A$	125			250	A/μs
Q_{rr}	Recovery charge	$I_{TM}=2000A$, tp=1000μs, di/dt=-20A/μs, $V_R=100V$	125		3500		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 90kN				0.005	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.0015	
F_m	Mounting force			81		108	kN
T_{stg}	Stored temperature			-40		140	°C
W_i	Weight				2050/2650		g
Outline	KT110cT/KT110dT						

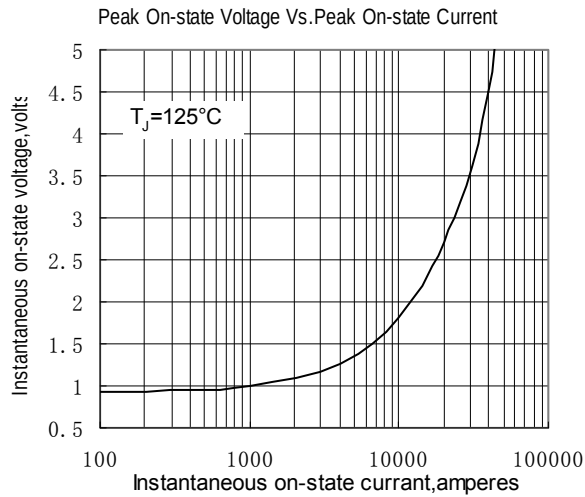


Fig.1

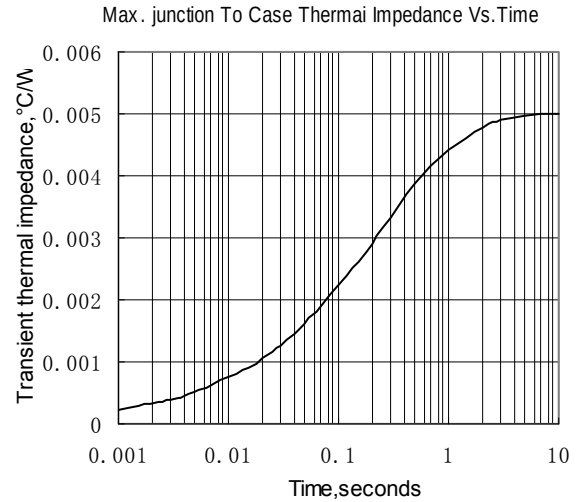


Fig.2

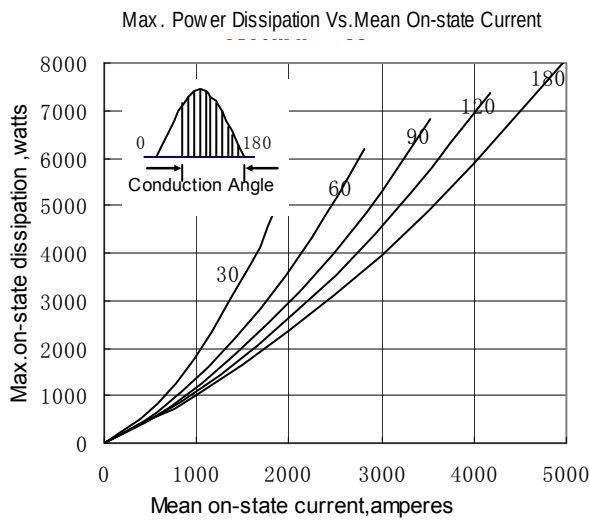


Fig.3

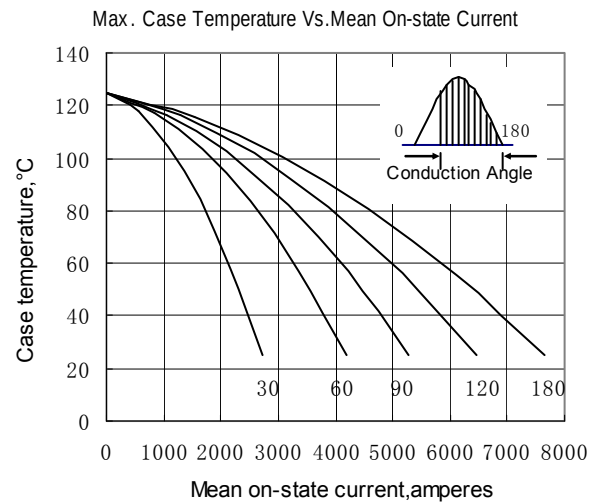


Fig.4

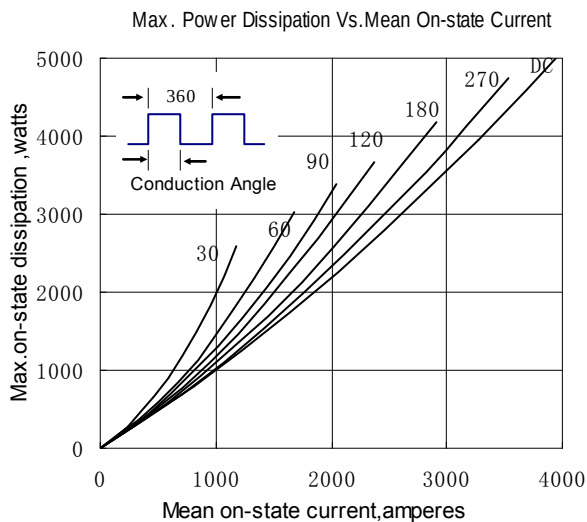


Fig.5

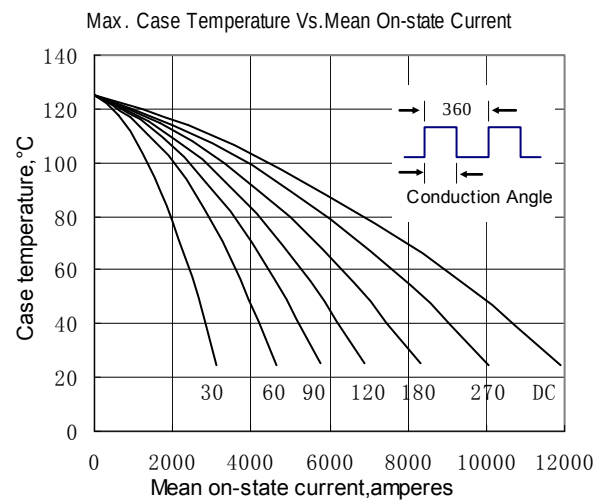


Fig.6

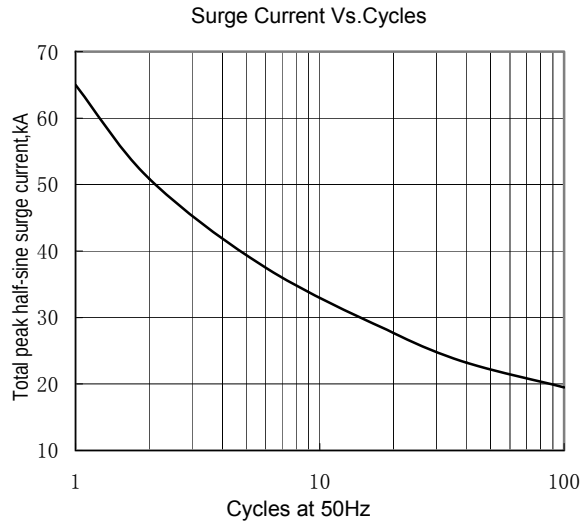


Fig.7

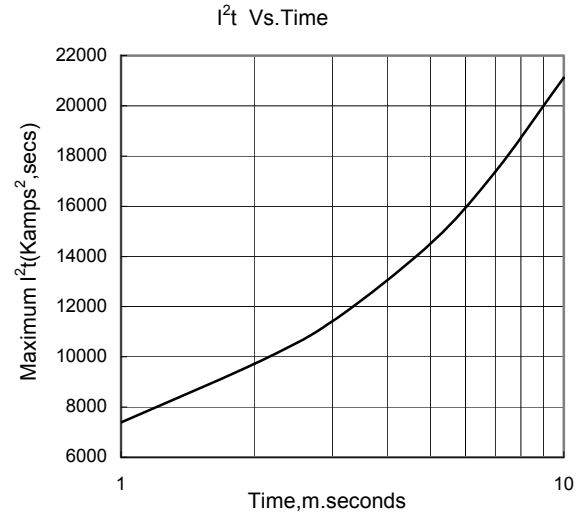


Fig.8

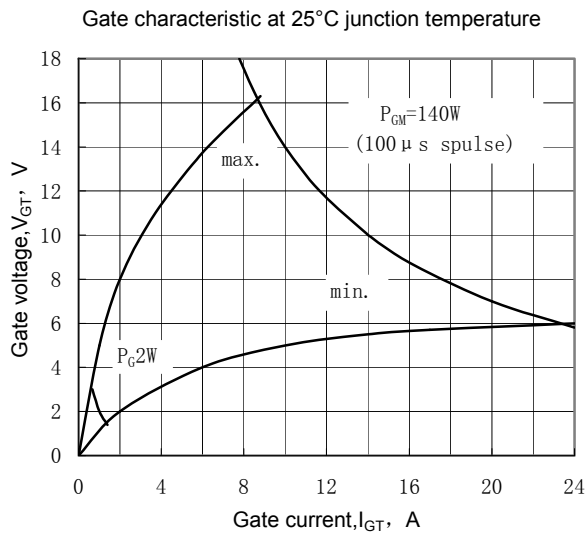


Fig.9

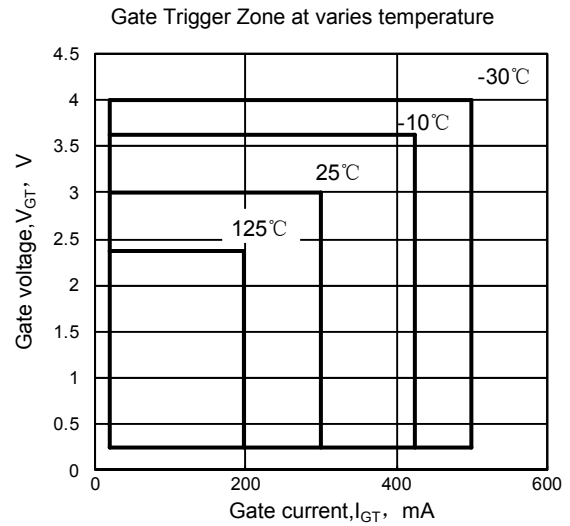


Fig.10

Outline: 图21-KT110cT

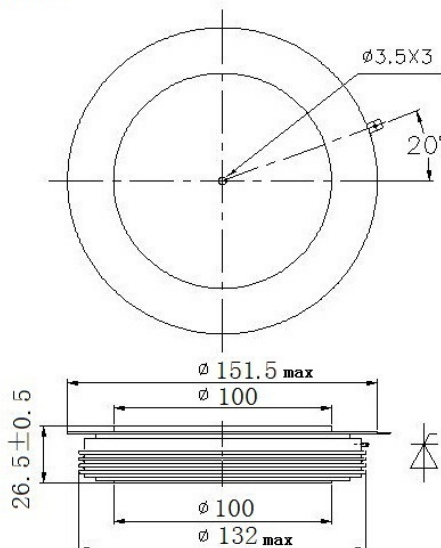


图22-KT110dT

