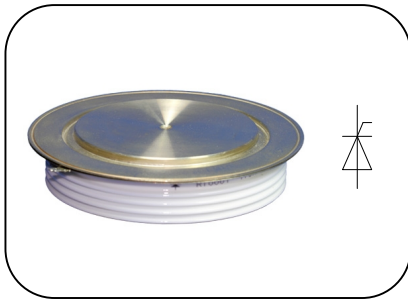


**Features :**

- 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

Part No. Y80KPE-KT75cT

$I_{T(AV)}$	3500A
V_{DRM}, V_{RRM}	1200V 1400V
	1600V 1800V
I_{TSM}	58 kA

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,	$T_C=70^{\circ}C$			3940	A
			$T_C=55^{\circ}C$			4603	A
			$T_C=85^{\circ}C$			3188	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			250	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=0V_{RRM}$	125			58	kA
I^2t	I^2t for fusing coordination					16820	10^3A^2s
V_{TO}	Threshold voltage		125			0.77	V
r_T	On-state slope resistance					0.09	m Ω
V_{TM}	Peak on-state voltage	$I_{TM}=5000A, F=40kN$	25			1.60	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 2500A, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$.	125			200	A/ μs
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
I_L	Latching current					1500	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 40kN				0.0085	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.0020	
F_m	Mounting force			63		84	kN
T_{vj}	Junction temperature			-40		125	$^{\circ}C$
T_{stg}	Stored temperature			-40		150	$^{\circ}C$
W_t	Weight				1230		g
Outline	KT75cT						

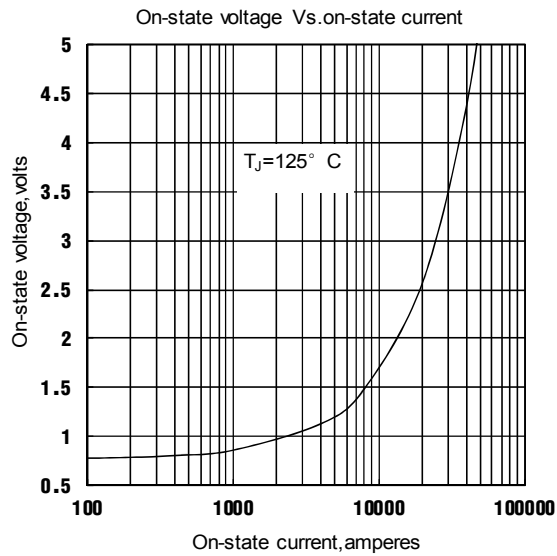


Fig.1

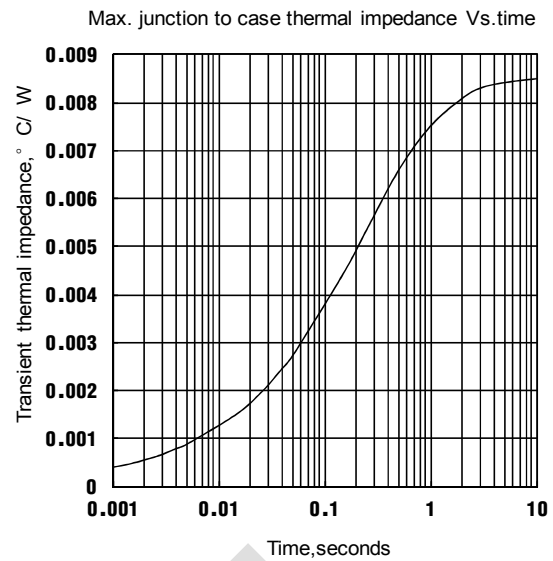


Fig.2

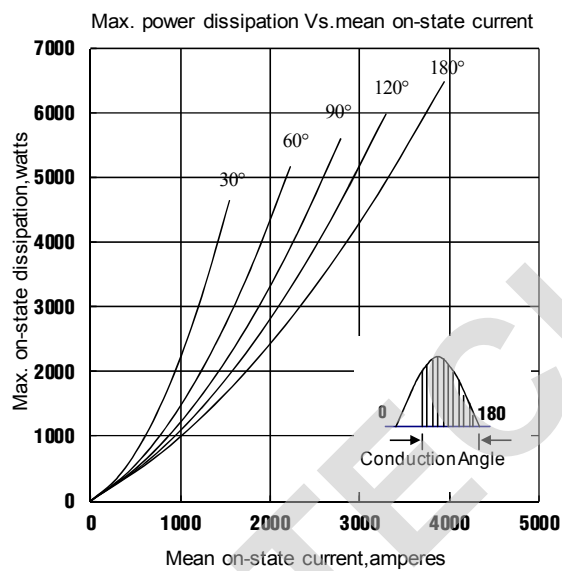


Fig.3

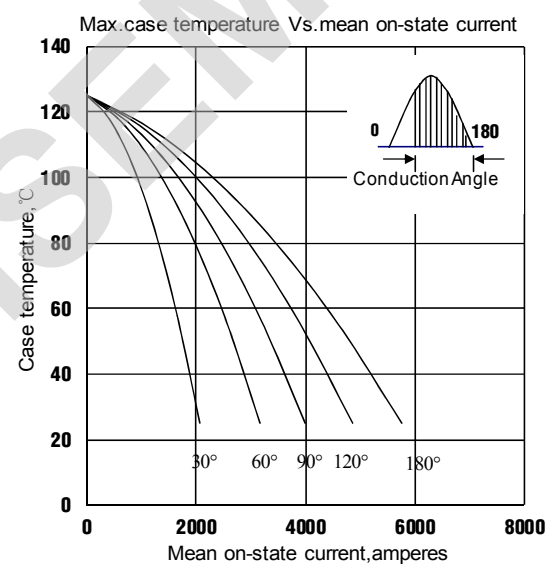


Fig.4

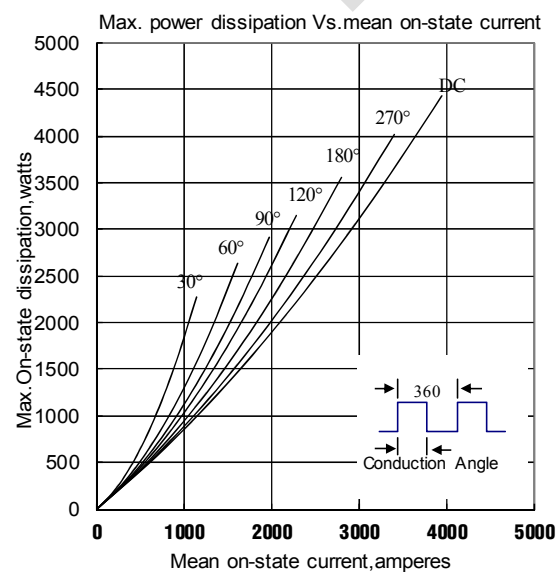


Fig.5

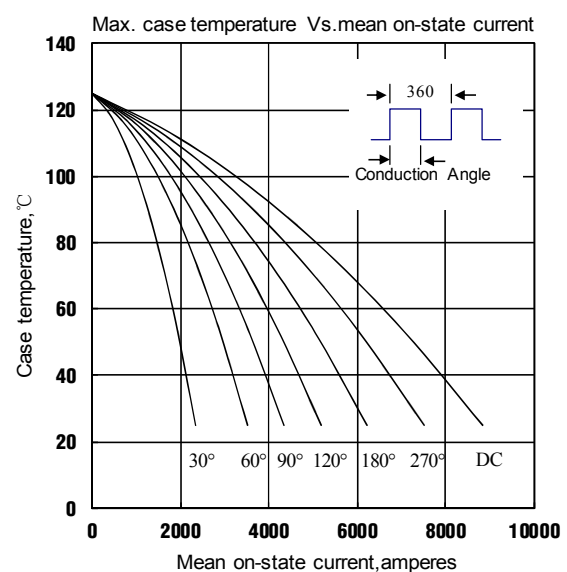


Fig.6

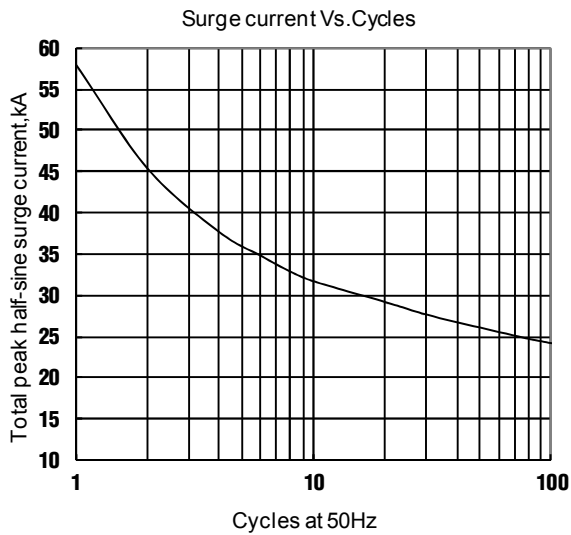


Fig.7

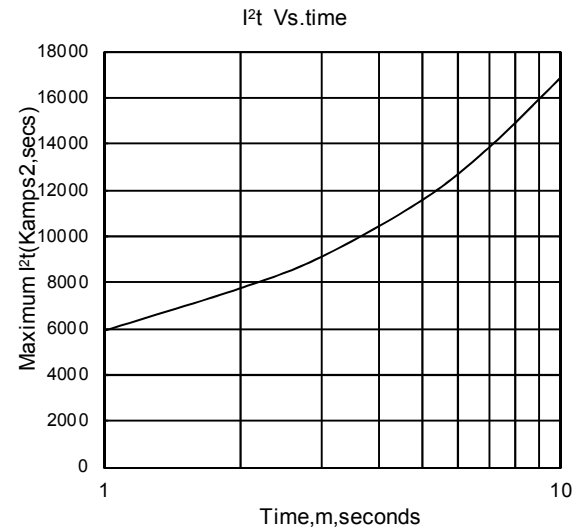


Fig.8

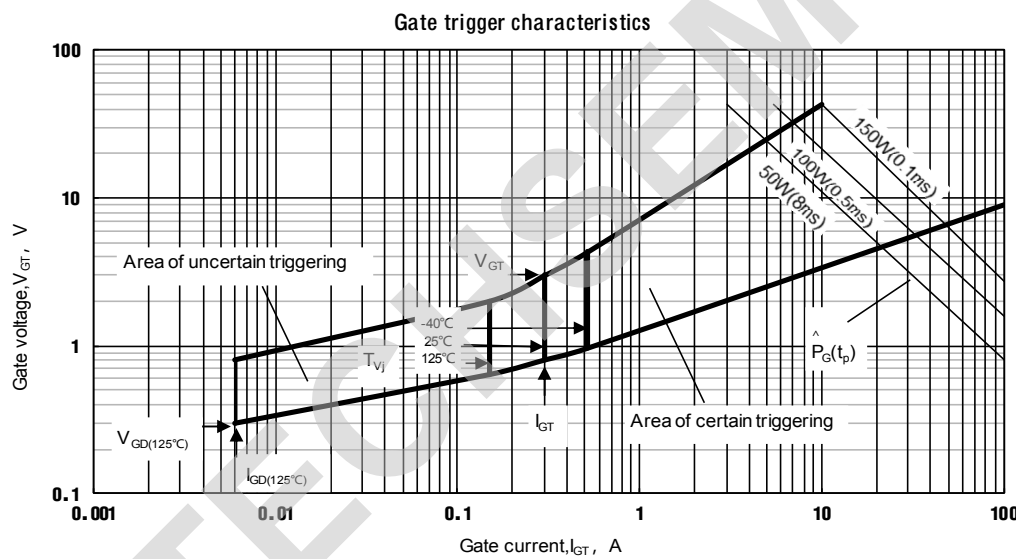


Fig.9

Outline:

