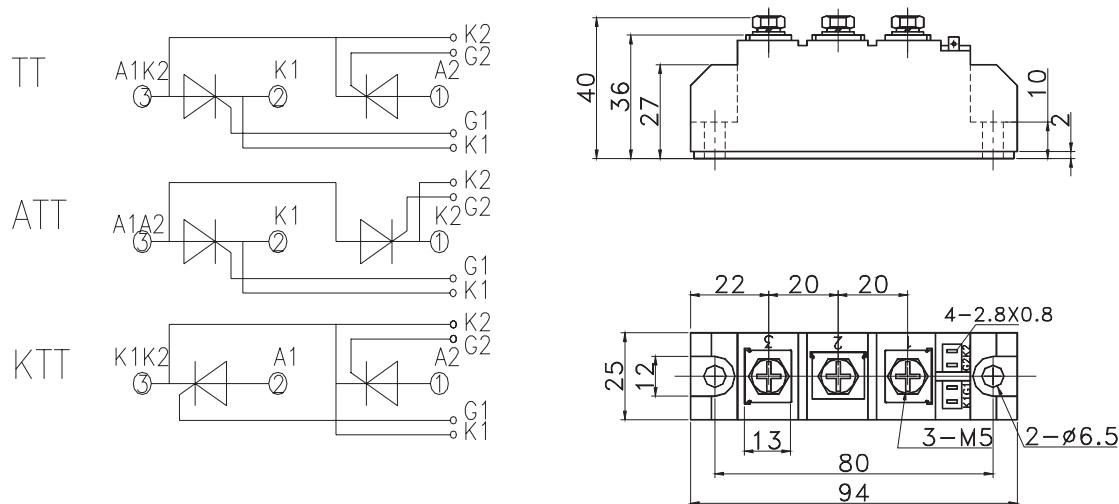


TT90 ATT90 KTT90

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^{\circ}\text{C}$	125			90	A
$I_{T(\text{RMS})}$	RMS on-state current	as AC switch				198	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{\text{DRM}} \& V_{\text{RRM}}$ tp=10ms $V_{\text{DsM}} \& V_{\text{RsM}} = V_{\text{DRM}} \& V_{\text{RRM}} + 200\text{V}$ respectively	125	600		1600	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			10	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			2.00	KA
I^2t	I^2t for fusing coordination	$V_R=60\%V_{\text{RRM}}$				20.4	$\text{A}^2\text{s} * 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					3.01	$\text{m}\Omega$
V_{TM}	Peak on-state voltage	$I_{\text{TM}}=270\text{A}$	125			1.70	V
dv/dt	Critical rate of rise of off-state voltage	$V_{\text{DM}}=67\%V_{\text{DRM}}$	125			800	V/s
di/dt	Critical rate of rise of on-state current	From 67% V_{DRM} to 270A, Gate source 1.5A $t_r < 0.5$ s Repetitive	125			100	A/s
I_{GT}	Gate trigger current			30		100	mA
V_{GT}	Gate trigger voltage	$V_A=12\text{V}$, $I_A=1\text{A}$	25	1.0		2.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	At 67% V_{DRM}	125			0.2	V
$R_{\text{th(j-c)}}$	Thermal resistance Junction to heatsink	At 180° sine Single side cooled				0.280	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min, $I_{\text{iso}}:1\text{mA}(\text{MAX})$	2500				V
F_m	Thermal connection torque(M5)				0.2		Nm
	Mounting torque(M6)				0.3		Nm
T_{stg}	Stored temperature			-40		140	$^{\circ}\text{C}$
W_t	Weight				160		g
Outline		202F3					

OUTLINE DRAWING & CIRCUIT DIAGRAM



Peak On-state Voltage Vs. Peak On-state Current

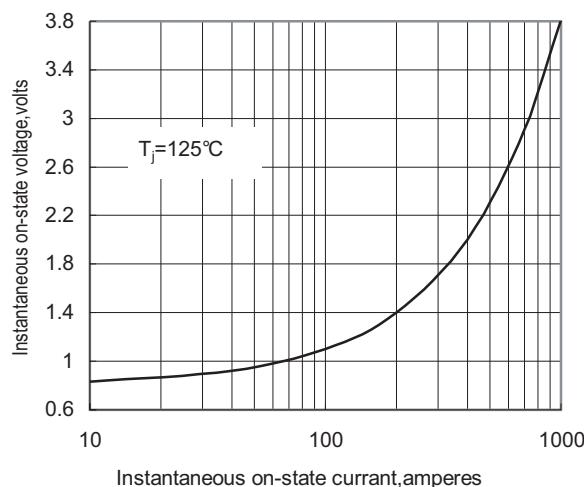


Fig.1

Max. junction To case Thermal Impedance Vs. Time

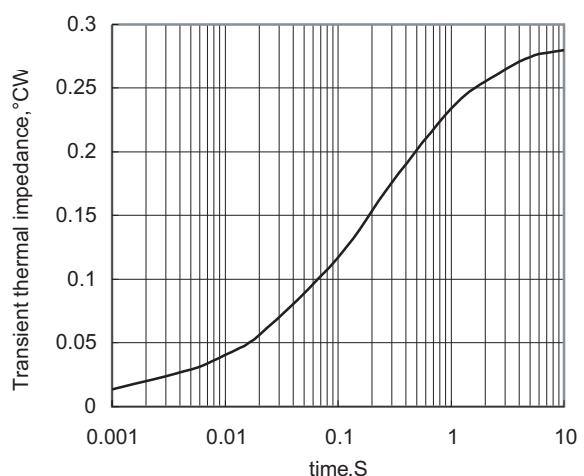


Fig.2

Max. Power Dissipation Vs. Mean On-state Current

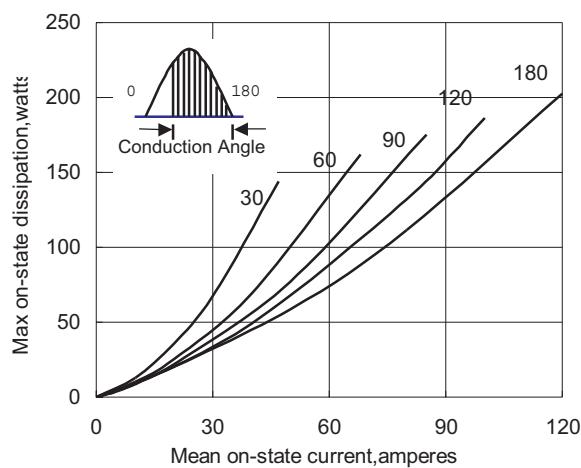


Fig.3

Max. case Temperature Vs. Mean On-state Current

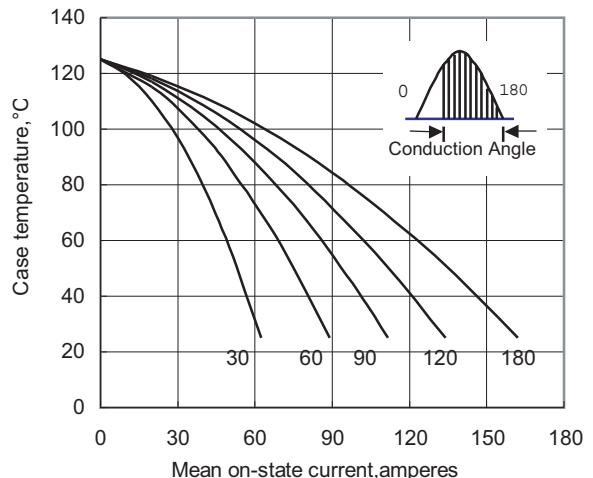


Fig.4

Max. Power Dissipation Vs. Mean On-state Current

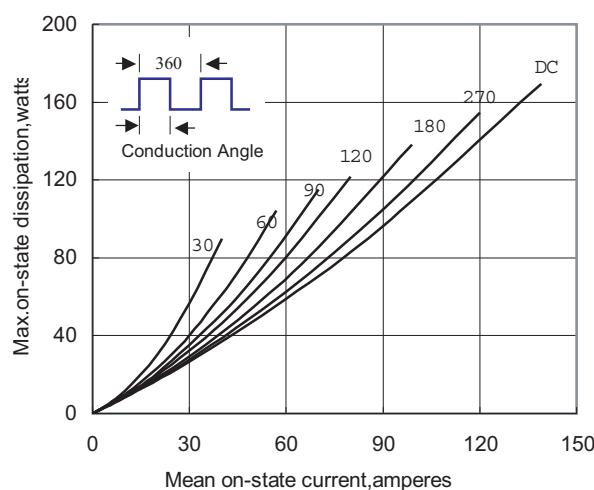


Fig.5

Max. case Temperature Vs. Mean On-state Current

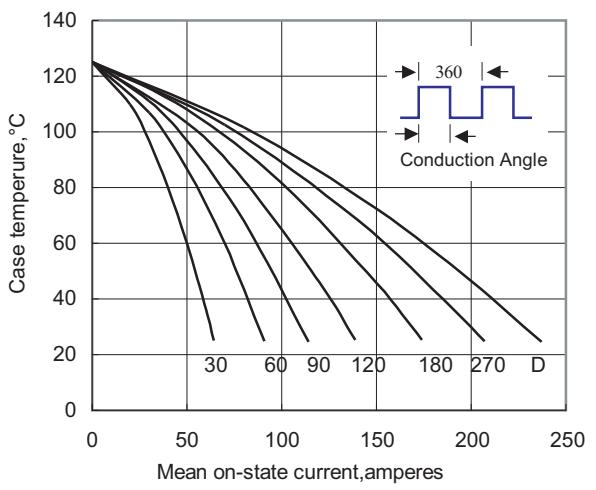


Fig.6

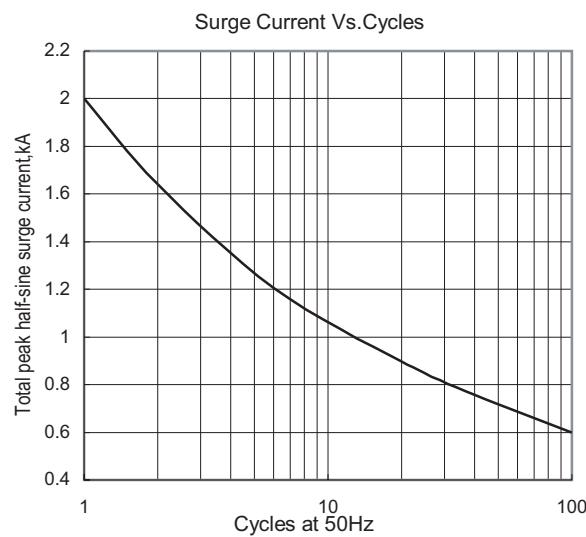


Fig.7

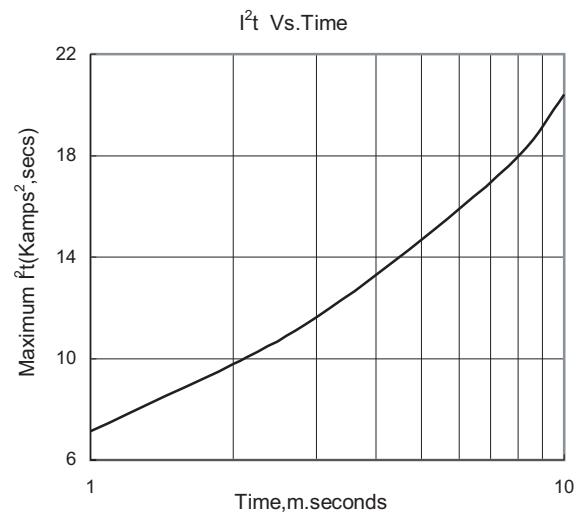


Fig.8

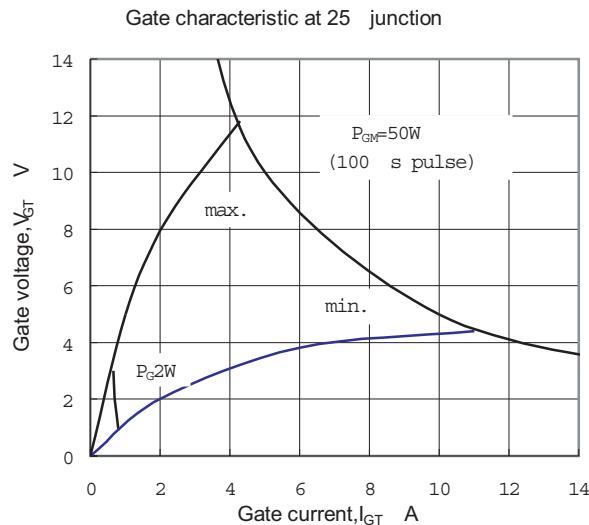


Fig.9

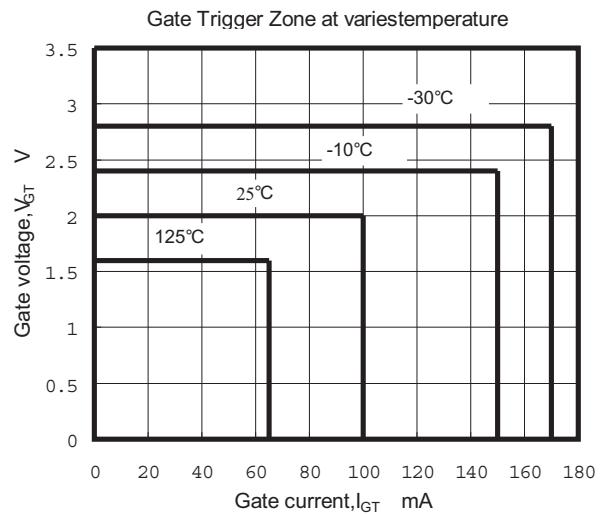


Fig.10