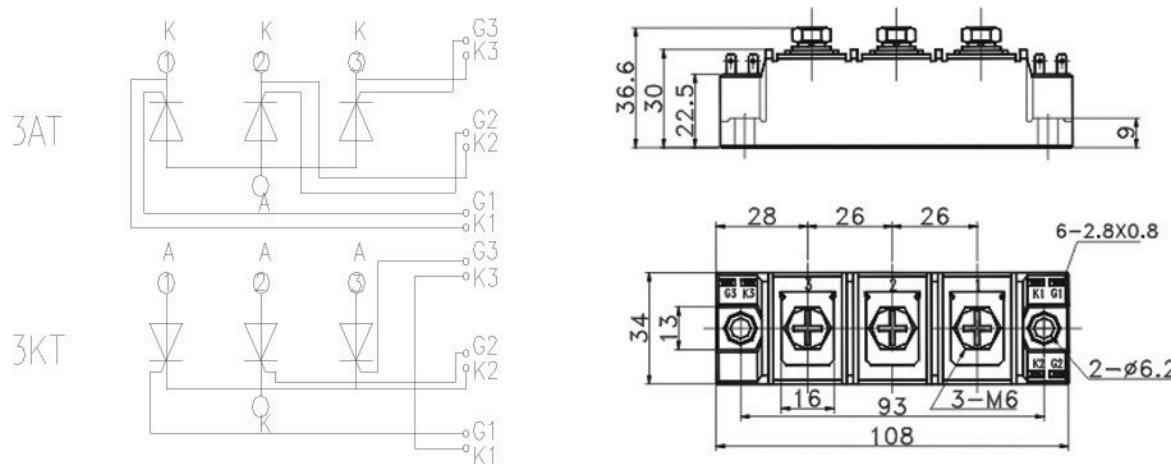


3AT200 3KT200 Charged part to case non-isolated

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=90^\circ C$	125			200	A
$I_{T(RMS)}$	RMS on-state current	Single side cooled, $T_c=90^\circ C$	125			314	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DsM} \& V_{RsM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	800		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			20	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			6.50	KA
I^2t	I^2T for fusing coordination					215	A^2s*10^3
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					1.15	$m\Omega$
V_{TM}	Peak on-state voltage	$I_{TM}=600A$	125			1.62	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/ μ s
di/dt	Critical rate of rise of on-state current	From 67% V_{DRM} to 600A, Gate source 1.5A $t \leq 0.5\mu s$ Repetitive	125			100	A/ μ s
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$	25	0.8		2.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	At 67% V_{DRM}	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to heatsink	Single side cooled				0.130	$^\circ C / W$
F_m	Thermal connection torque(M6)				0.30		N·m
	Mounting torque(M6)				0.30		N·m
T_{stg}	Stored temperature			-40		140	$^\circ C$
W_t	Weight					340	g
Outline		206F4					

OUTLINE DRAWING & CIRCUIT DIAGRAM



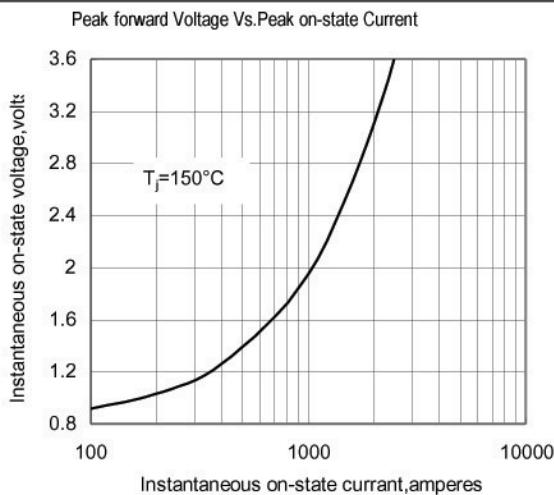


Fig.1

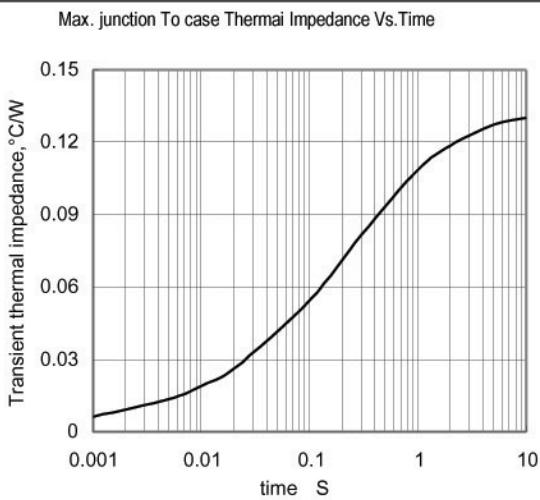


Fig.2

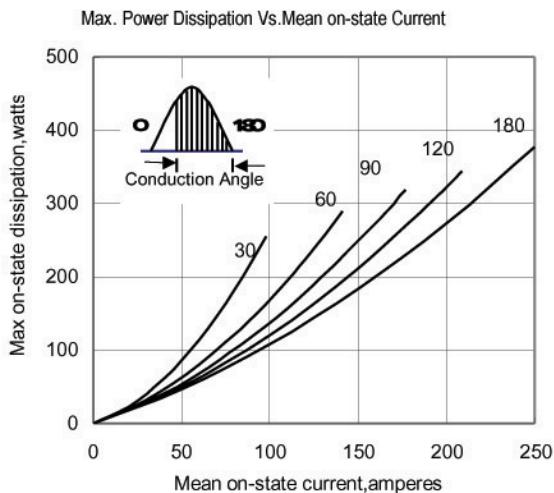


Fig.3

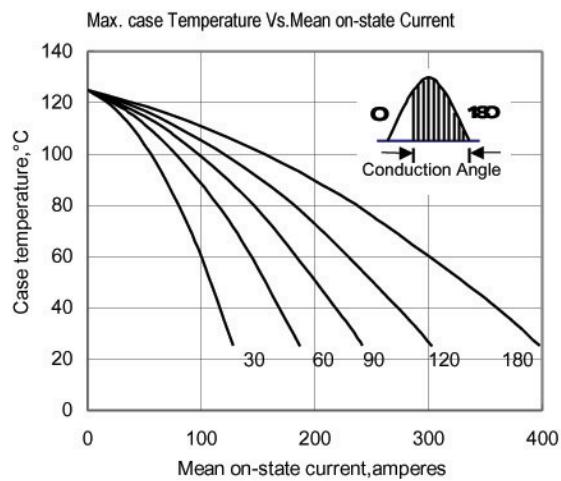


Fig.4

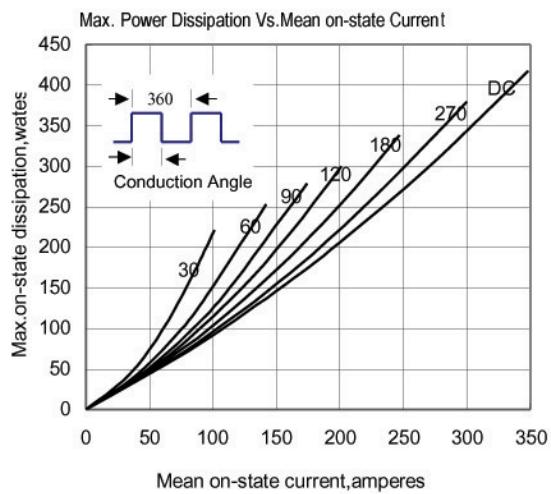


Fig.5

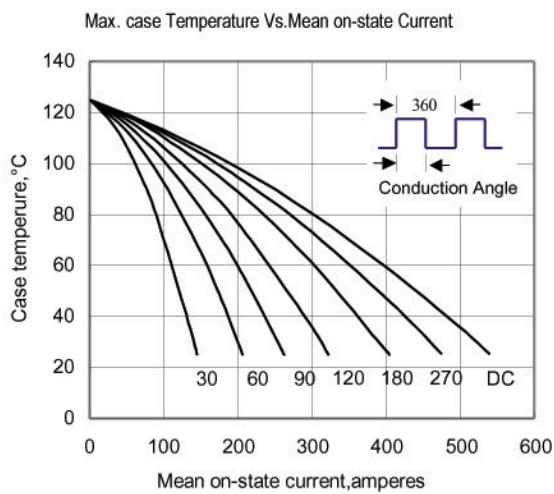


Fig.6