Features：

- **n** Isolated mounting base 3000V~
- **n** Pressure contact technology with Increased power cycling capability
- **n** Space and weight saving

Typical Applications

- **n** AC/DC Motor drives
- **n** Various rectifiers
- **n** DC supply for PWM inverter

V_{DRM}, V_{RRM}	Type & Outline	
2000V	MTC200-20-216F3E	MTC200-20-216F3EB
2200V	MTC200-22-216F3E	MTC200-22-216F3EB
2500V	MTC200-25-216F3E	MTC200-25-216F3EB
2500V	MT200-25-216F3EG	

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=85°C	125			200	A
$I_{T(RMS)}$	RMS on-state current		125			314	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			30	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=60%V_{RRM}	125			7.0	kA
I^2t	I^2t for fusing coordination					245	10^3A^2s
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slope resistance					1.40	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=600A	25			2.10	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM}=67%V_{DRM}	125			1000	V/μs
di/dt	Critical rate of rise of on-state current	I_{TM}=400A, Gate source 1.5A t_r≤0.5μs Repetitive	125			200	A/μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		180	mA
V_{GT}	Gate trigger voltage			0.7		2.5	V
I_H	Holding current			20		200	mA
V_{GD}	Non-trigger gate voltage	V_{DM}=67%V_{DRM}	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.120	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Single side cooled per chip				0.080	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque (M6)			4.5		6.0	N·m
	Mounting torque (M6)			4.5		6.0	N·m
T_j	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				350		g
Outline	216F3E, 216F3EB						

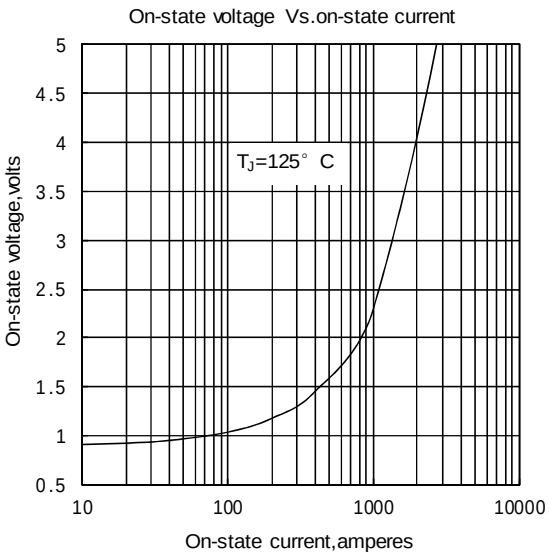


Fig.1

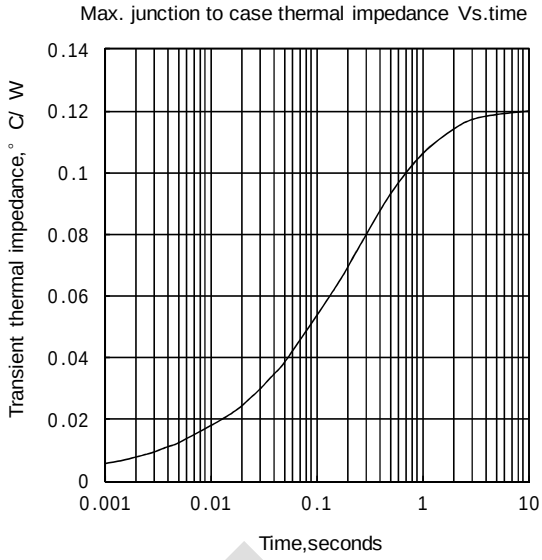


Fig.2

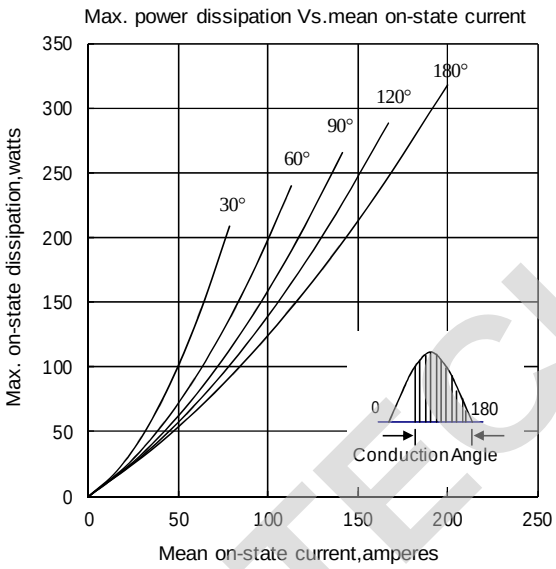


Fig.3

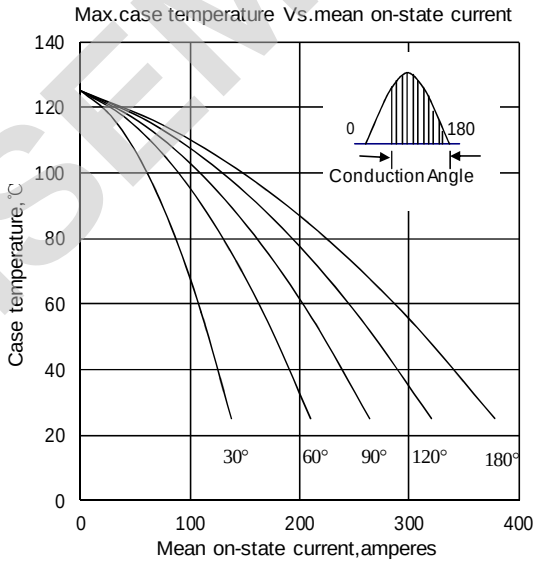


Fig.4

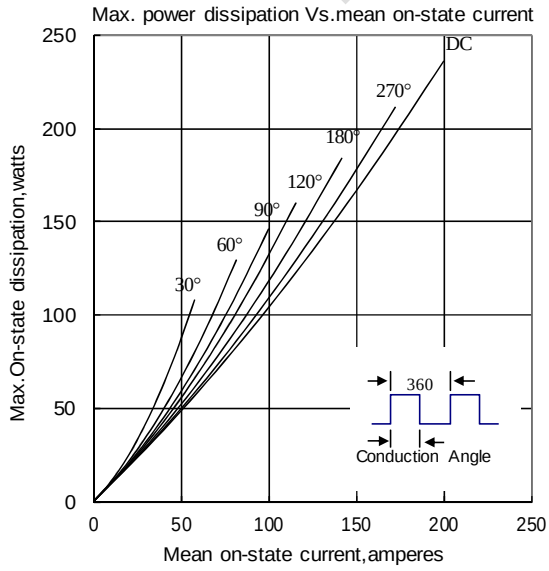


Fig.5

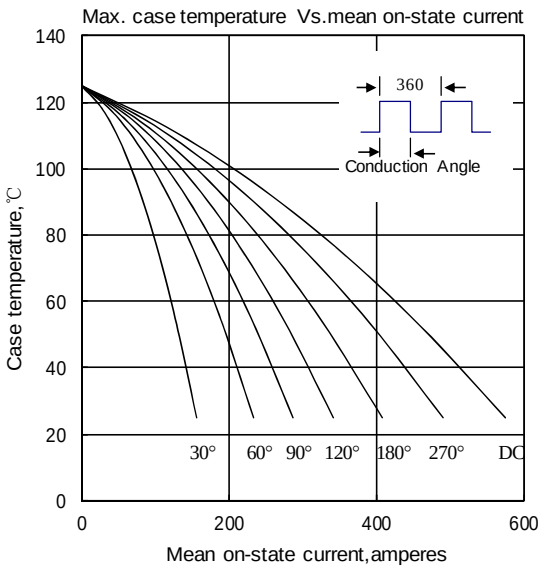


Fig.6

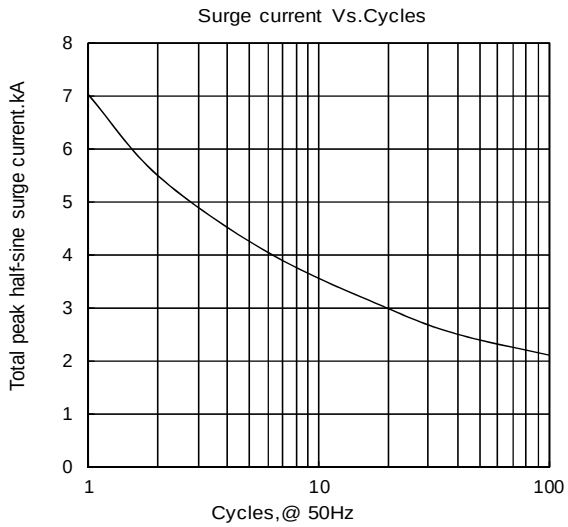


Fig.7

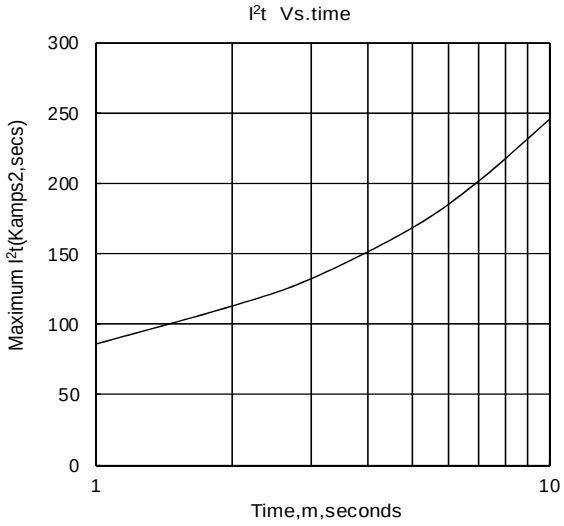


Fig.8

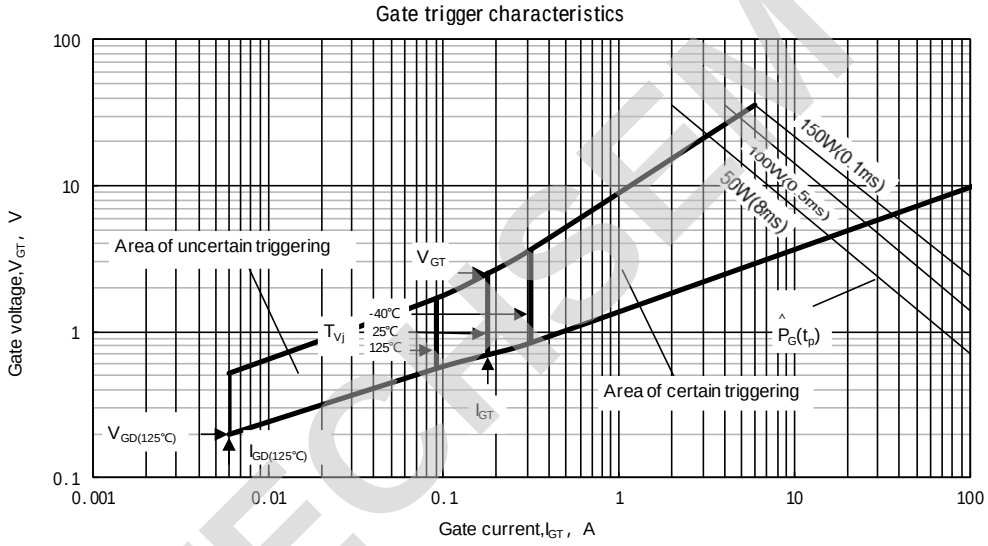
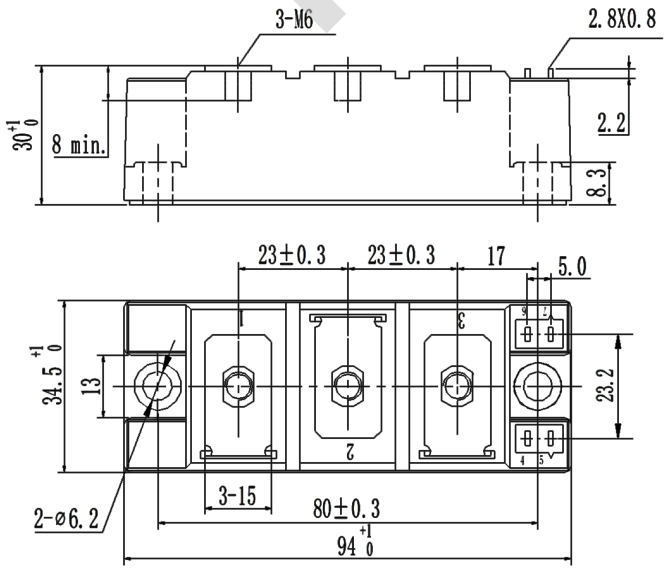
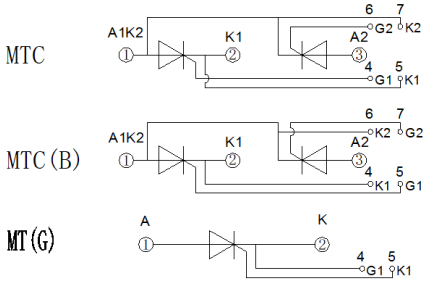


Fig.9

Outline:





Unmarked dimensional tolerance：±0.5mm

TECHSEM reserves the right to change specifications without notice.