**Features:**

- Non-isolated. Mounting base as anode or cathode terminal
- Pressure contact technology with Increased power cycling capability
- Low on-state voltage drop

Typical Applications:

- Welding Power Supply
- Various DC Power supplies
- DC supply for PWM inverter

V_{DRM}, V_{RRM}	Type & Outline	
800V	MT200-08-210F2NA	MT200-08-210F2NK
1000V	MT200-10-210F2NA	MT200-10-210F2NK
1200V	MT200-12-210F2NA	MT200-12-210F2NK
1400V	MT200-14-210F2NA	MT200-14-210F2NK
1600V	MT200-16-210F2NA	MT200-16-210F2NK
1800V	MT200-18-210F2NA	MT200-18-210F2NK

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, $T_c=90^{\circ}\text{C}$	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			12	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			5.2	kA
I^2t	I^2t for fusing coordination					135	$10^3\text{A}^2\text{s}$
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slope resistance					1.15	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=600\text{A}$	25			1.62	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A $t_r \leq 0.5\mu\text{s}$ Repetitive	125			100	A/μs
I_{GT}	Gate trigger current	$V_A=12\text{V}$, $I_A=1\text{A}$	25	30		150	mA
V_{GT}	Gate trigger voltage			0.8		2.5	V
I_H	Holding current			20		120	mA
I_L	Latching current					1000	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				0.13	$^{\circ}\text{C/W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.10	$^{\circ}\text{C/W}$
F_m	Terminal connection torque(M6)			4.5		6.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		125	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				185		g
Outline	210F2NA, 210F2NK						

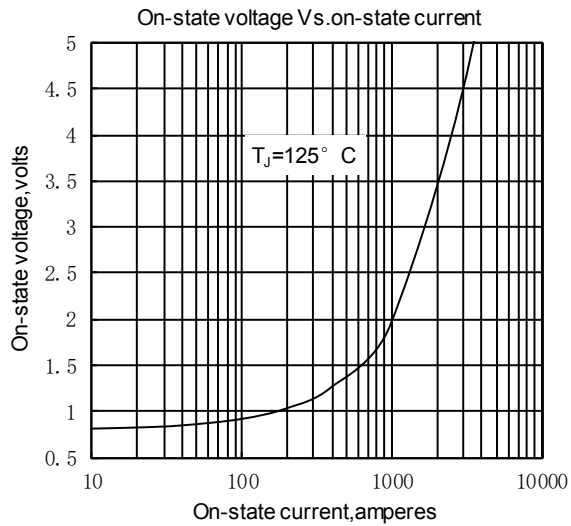


Fig.1

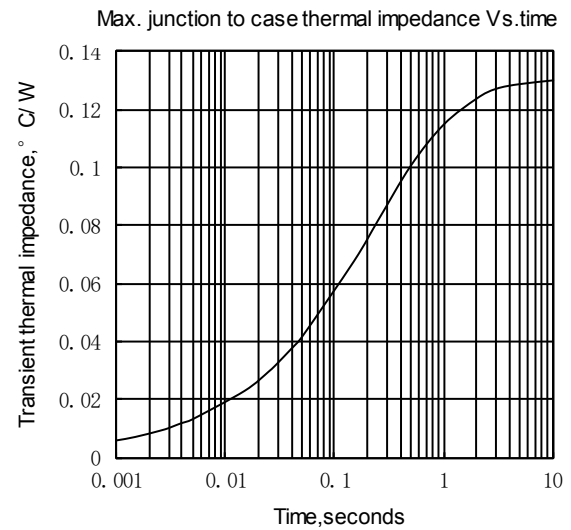


Fig.2

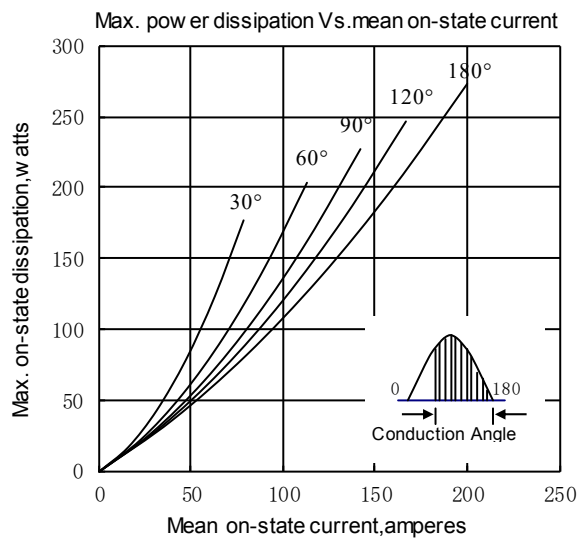


Fig.3

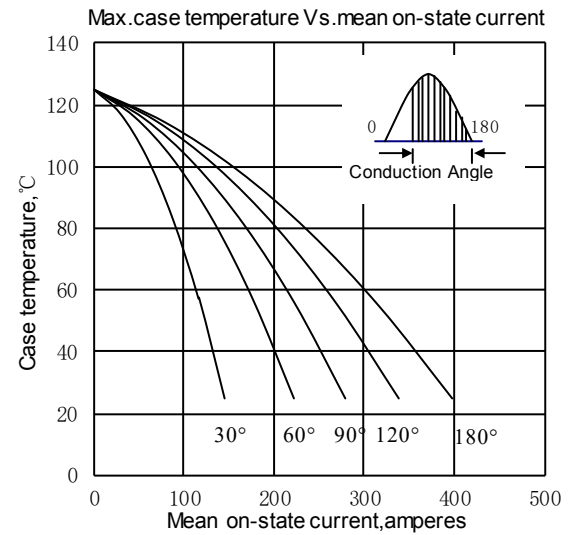


Fig.4

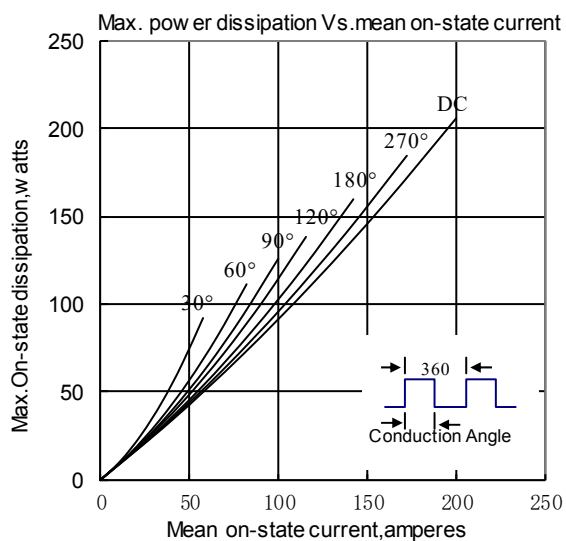


Fig.5

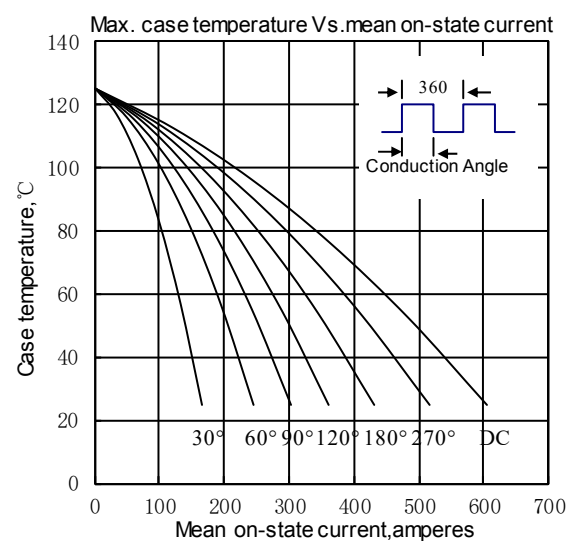


Fig.6

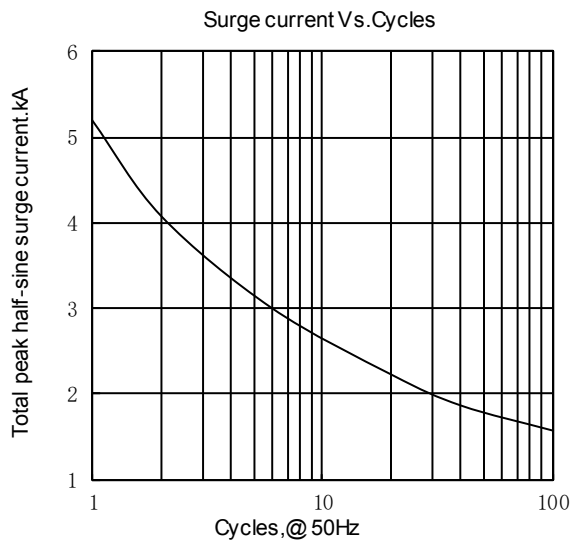


Fig.7

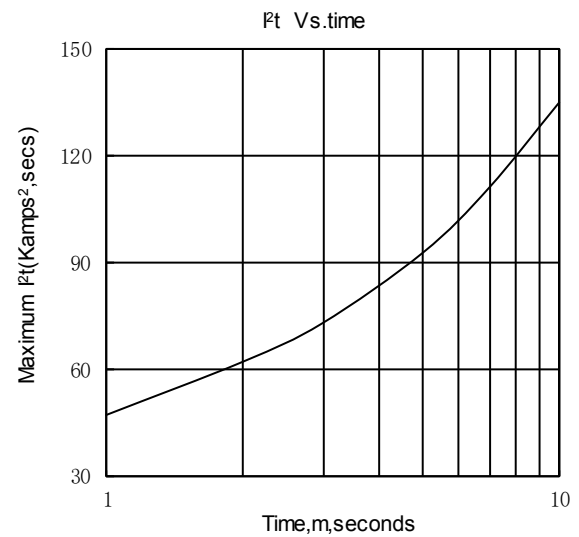


Fig.8

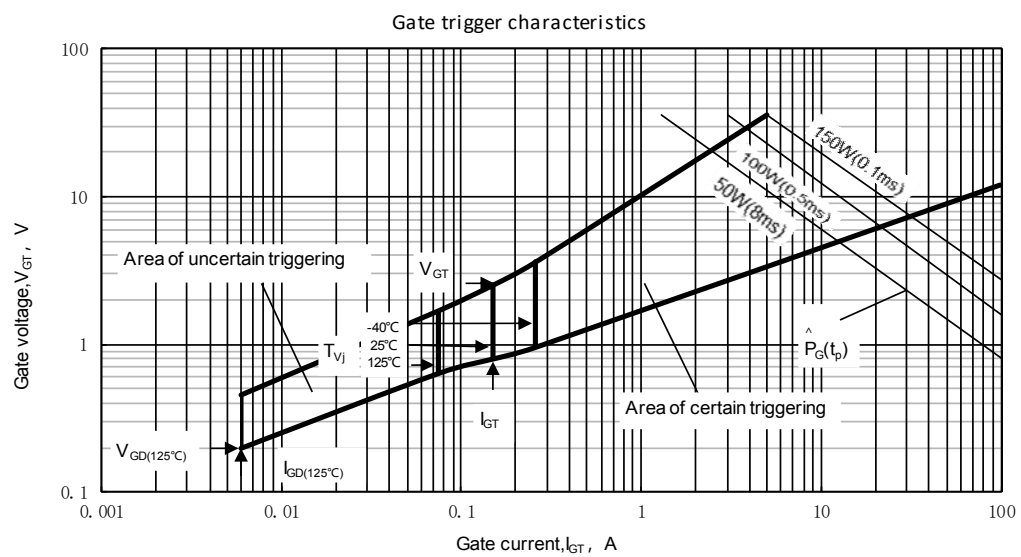
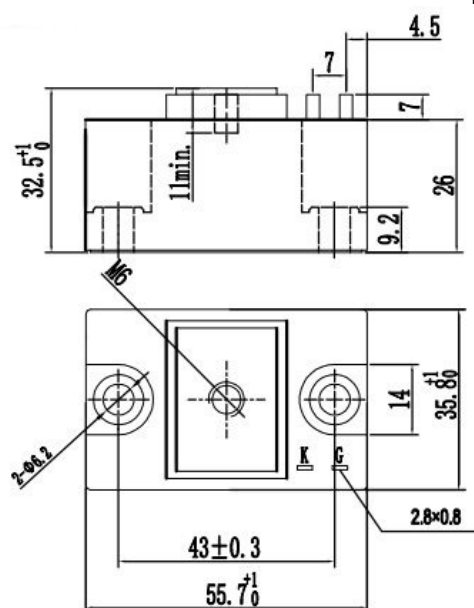


Fig.9

Outline:



Unmarked dimensional tolerance: $\pm 0.5\text{mm}$

TECHSEM reserves the right to change specifications without notice.

