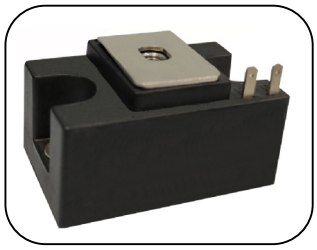


Features：

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

Typical Applications：

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

V_{DRM},V_{RRM}	Type & Outline	
2000V	MT200-20-210F2NA	MT200-20-210F2NK
2200V	MT200-22-210F2NA	MT200-22-210F2NK
2500V	MT200-25-210F2NA	MT200-25-210F2NK

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°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			25	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=60%V_{RRM}	125			4.9	kA
I^2t	I^2t for fusing coordination					120	10^3A^2s
V_{TO}	Threshold voltage		125			0.79	V
r_T	On-state slope resistance					1.13	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			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A t_r≤0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		150	mA
V_{GT}	Gate trigger voltage			0.8		2.5	V
I_H	Holding current			10		200	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	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.10	°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	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				185		g
Outline	210F2NA, 210F2NK						

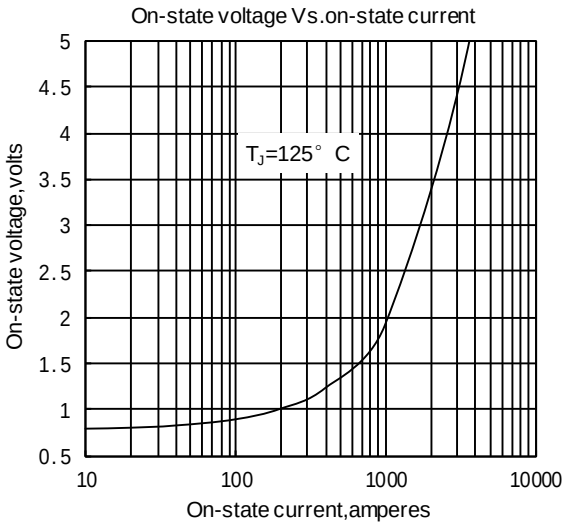


Fig.1

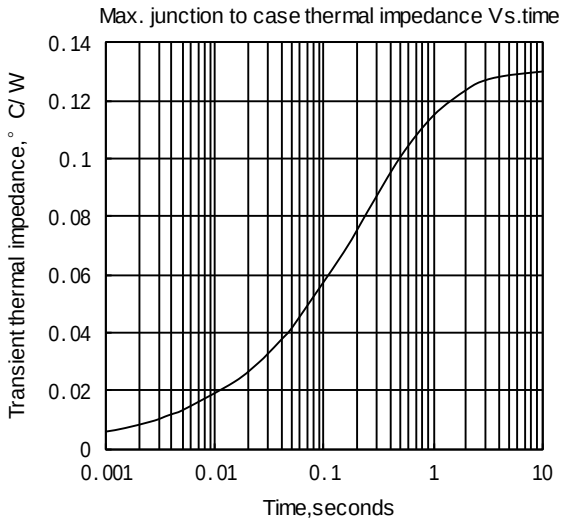


Fig.2

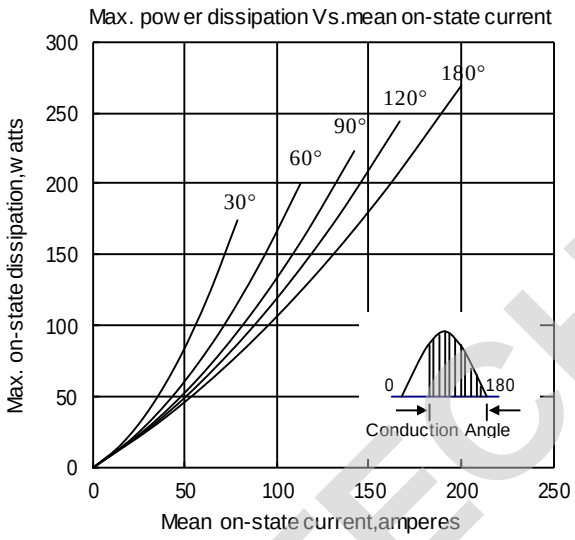


Fig.3

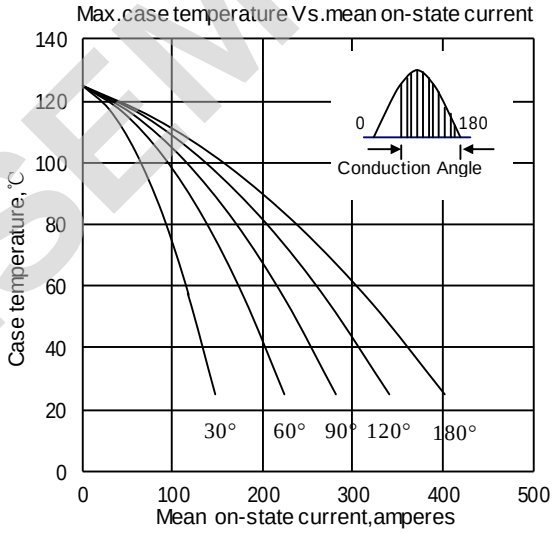


Fig.4

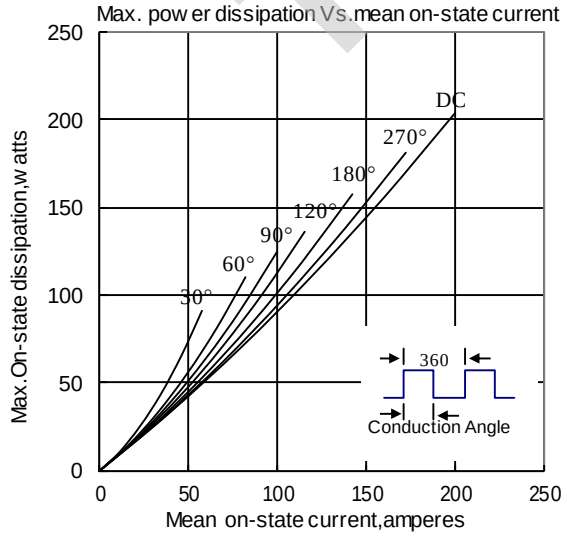


Fig.5

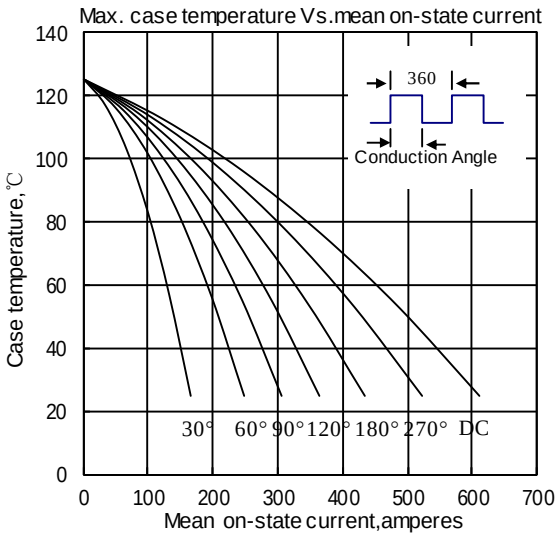


Fig.6

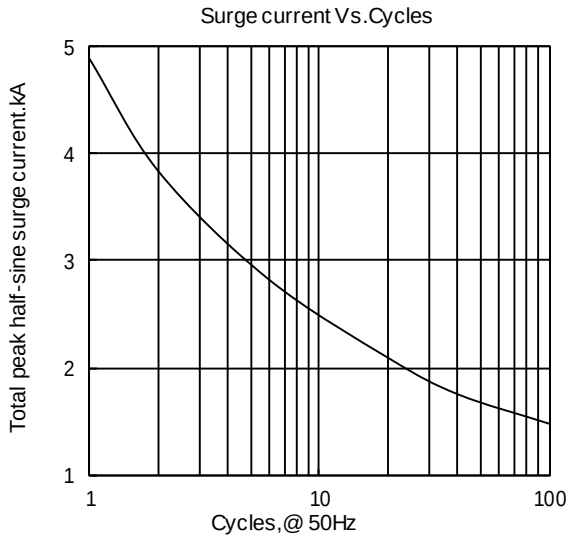


Fig.7

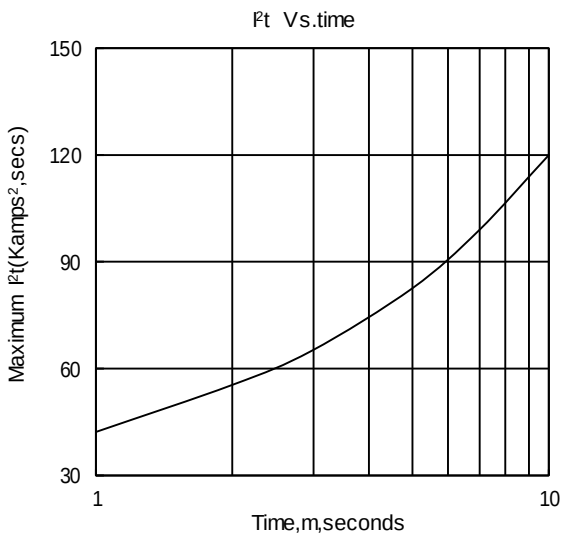


Fig.8

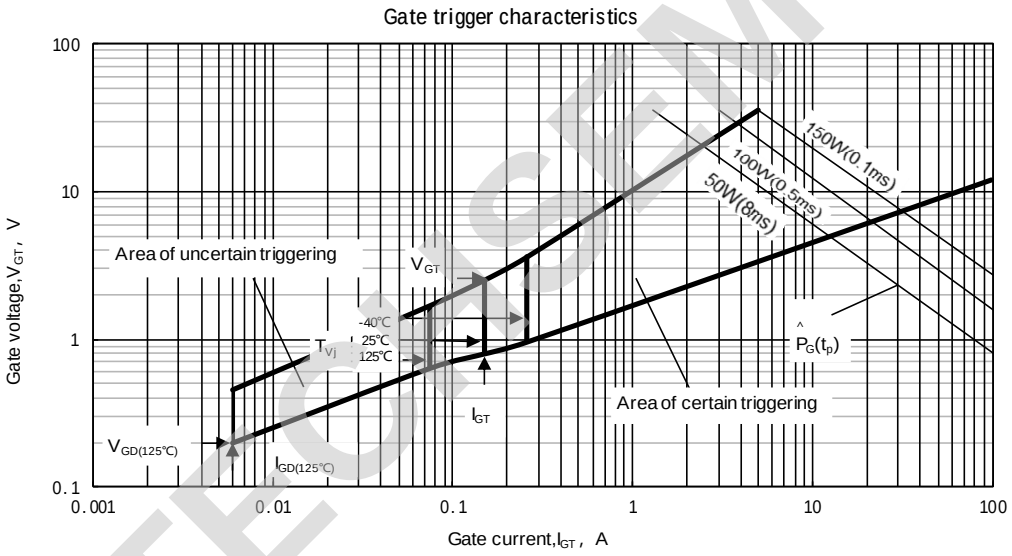
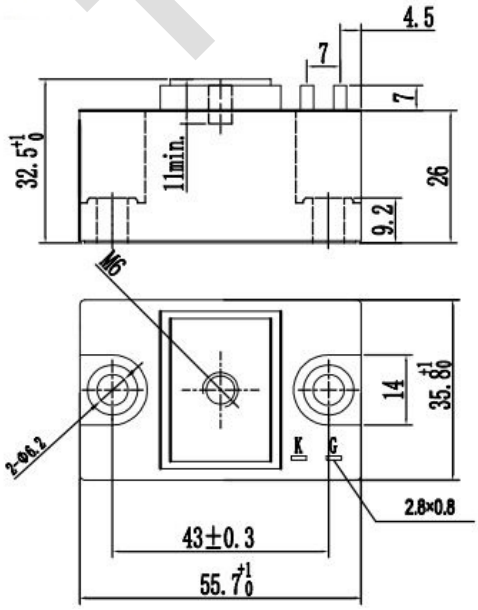
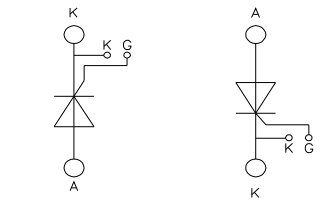


Fig.9

Outline:





MT(NA) MT(NK)

Unmarked dimensional tolerance：±0.5mm