Features：

- Isolated mounting base 4000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications：

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

V_{DSM},V_{RSM}	V_{DRM},V_{RRM}	品名
2700V	2600V	Mx500TH260
2900V	2800V	Mx500TH280
3100V	3000V	Mx500TH300
3300V	3200V	Mx500TH320
3500V	3400V	Mx500TH340
3700V	3600V	Mx500TH360

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			500	A
$I_{T(RMS)}$	RMS on-state current					785	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			55	mA
I_{TSM}	Surge on-state current	V_R=60%V_{RRM},t=10ms half sine,	125			12.5	kA
I^2t	I^2t for fusing coordination		125			781	10^3A^2s
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slope resistance					0.50	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=1500A	25			2.48	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	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		200	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			20		200	mA
I_L	Latching current					1000	mA
V_{GD}	Non-trigger gate voltage	V_{DM}=67%V_{DRM}	125			0.20	V
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.054	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.024	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		4000			V
F_m	Terminal connection torque(M12)			12		16	N·m
	Mounting torque(M8)			10		12	N·m
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				3310		g
Outline	M07						

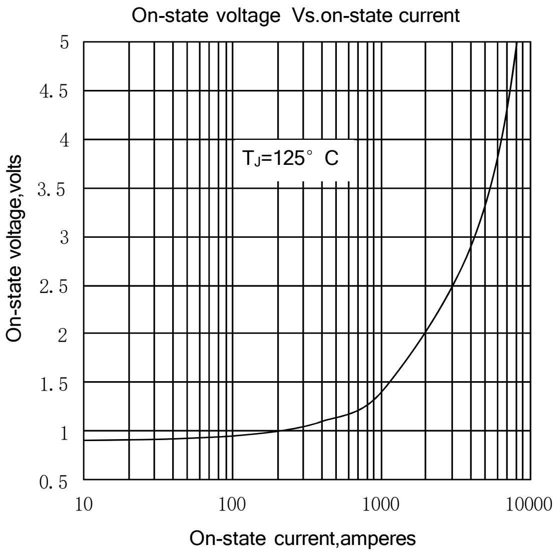

On-state voltage Vs.on-state current

Fig.1

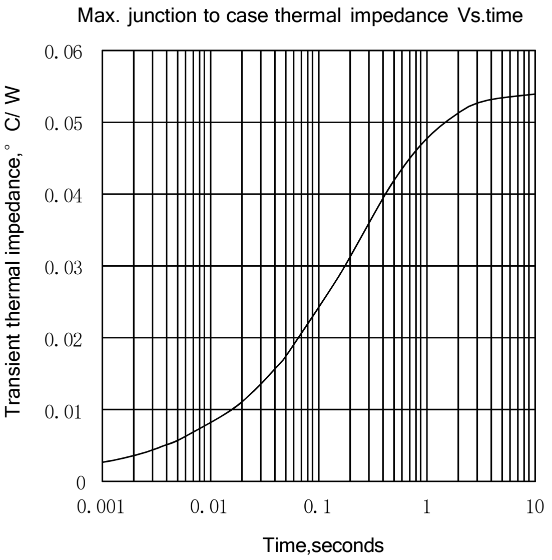

Max. junction to case thermal impedance Vs.time

Fig.2

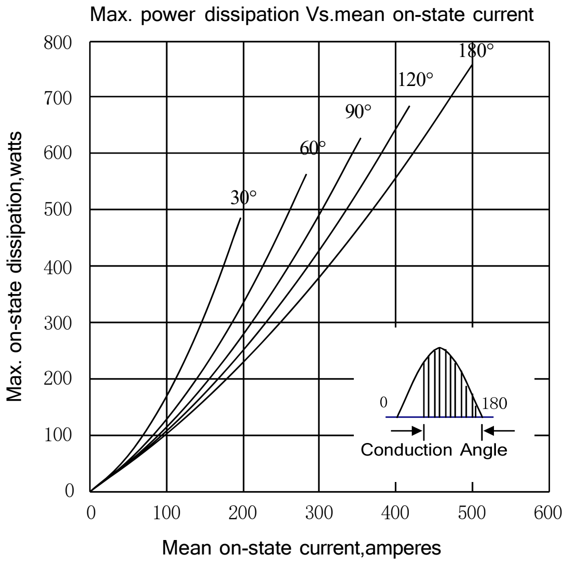

Max. power dissipation Vs.mean on-state current

Fig.3

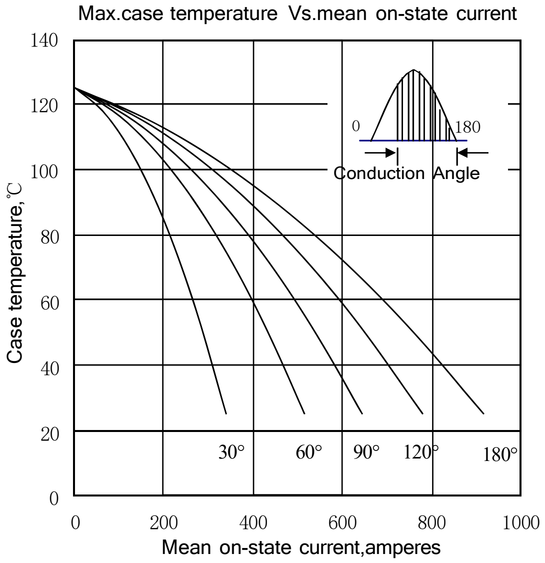

Max.case temperature Vs.mean on-state current

Fig.4

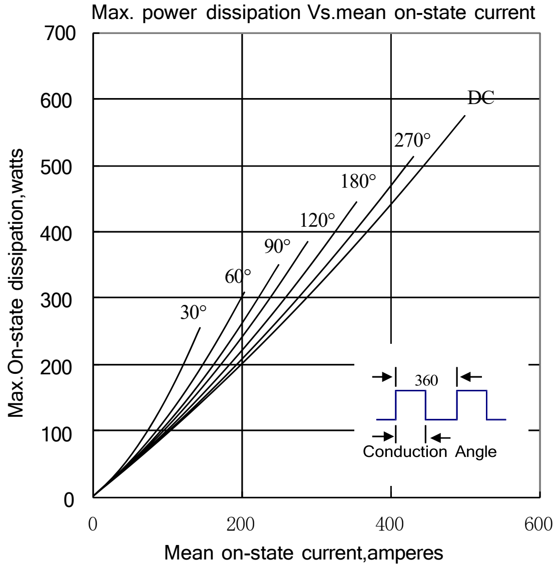

Max. power dissipation Vs.mean on-state current

Fig.5

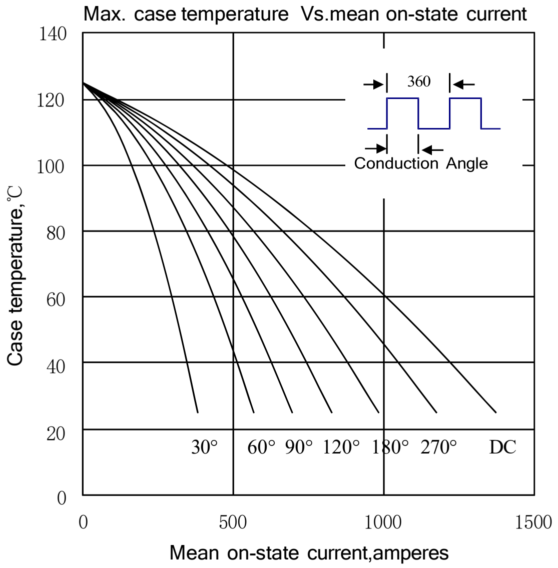

Max. case temperature Vs.mean on-state current

Fig.6

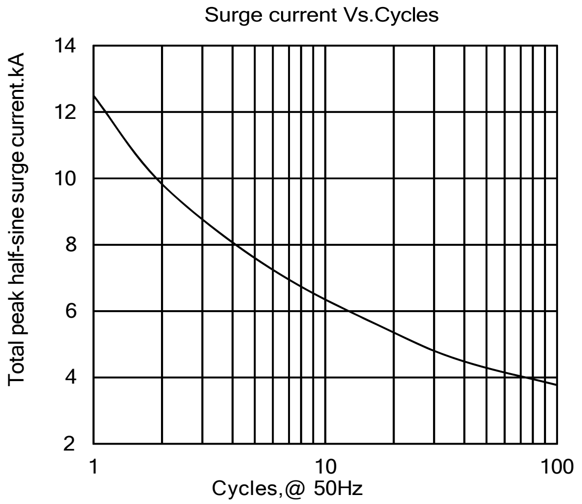


Fig. 7

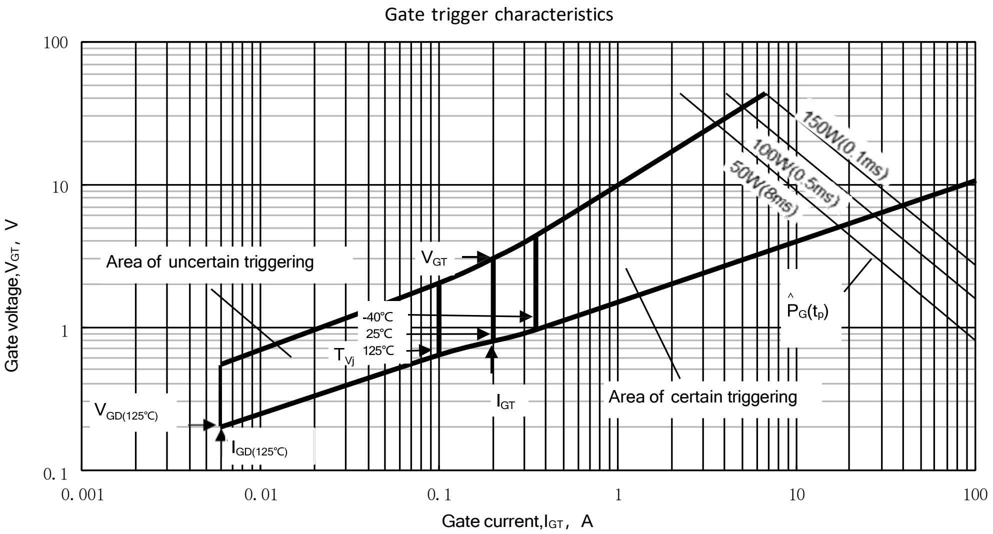
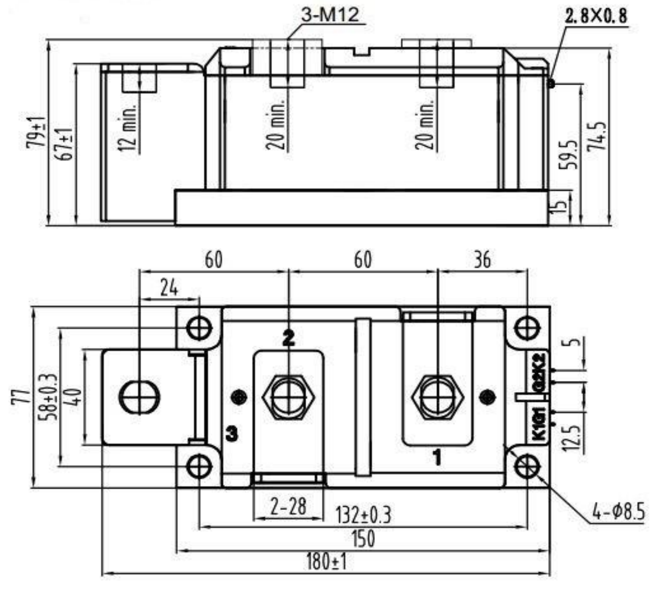
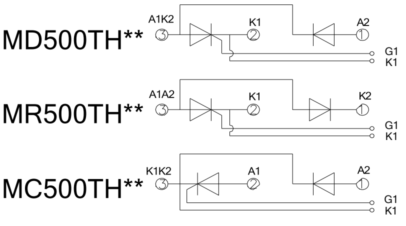


Fig. 8

Outline:





Unmarked dimensional tolerance：±0.5mm

NIPS reserves the right to change specifications without notice.