Features：

- Isolated mounting base 3000V~
- 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

VDSM,VRSM	VDRM,VRRM	品名
700V	600V	Mx1500TH60
900V	800V	Mx1500TH80
1100V	1000V	Mx1500TH100
1300V	1200V	Mx1500TH120
1500V	1400V	Mx1500TH140
1700V	1600V	Mx1500TH160
1900V	1800V	Mx1500TH180

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=70°C	125			1500	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			130	mA
I_{TSM}	Surge on-state current	V_R=60%V_{RRM}, t=10ms half sine,	125			30	kA
I^2t	I^2t for fusing coordination		125			4500	10^3A^2s
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slope resistance					0.14	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=3000A	25			1.60	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	40		200	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			20		200	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				0.025	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.018	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M16)				20		N·m
	Mounting torque(M12)				14		N·m
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				6800		g
Outline	M46						

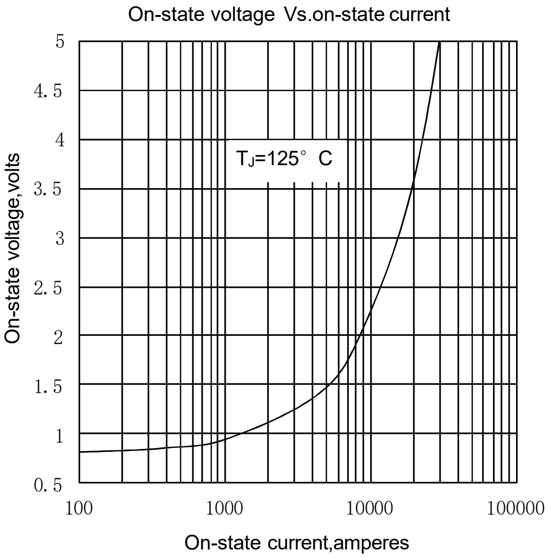


Fig.1

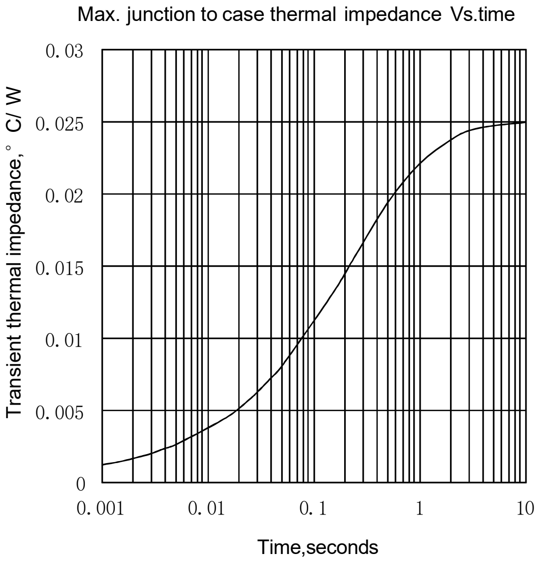


Fig.2

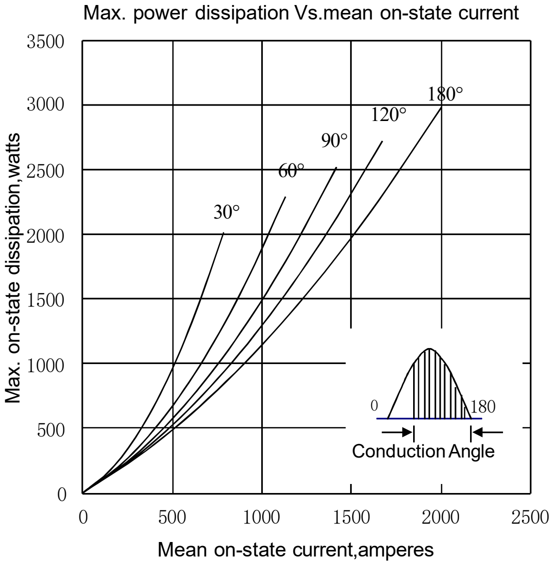


Fig.3

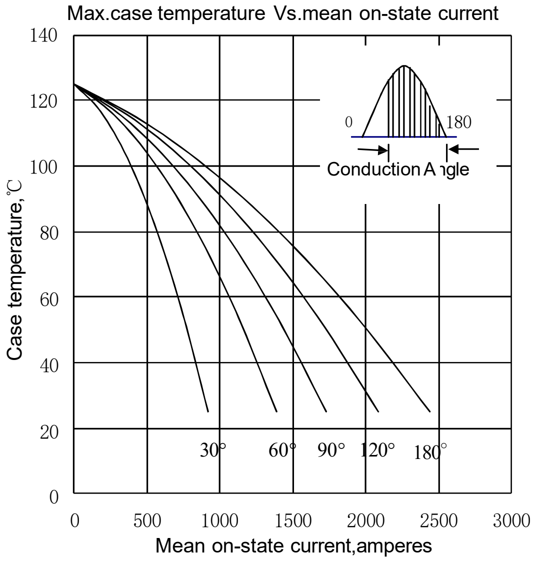


Fig.4

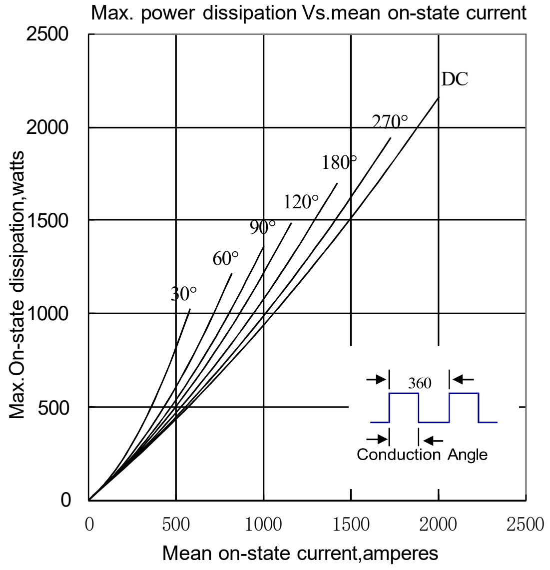


Fig.5

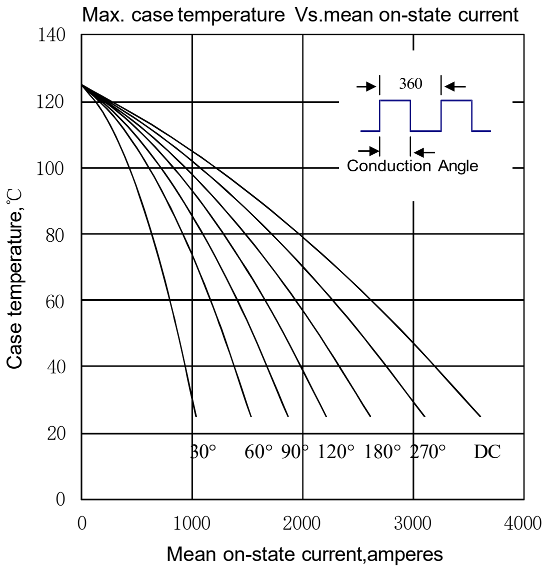


Fig.6

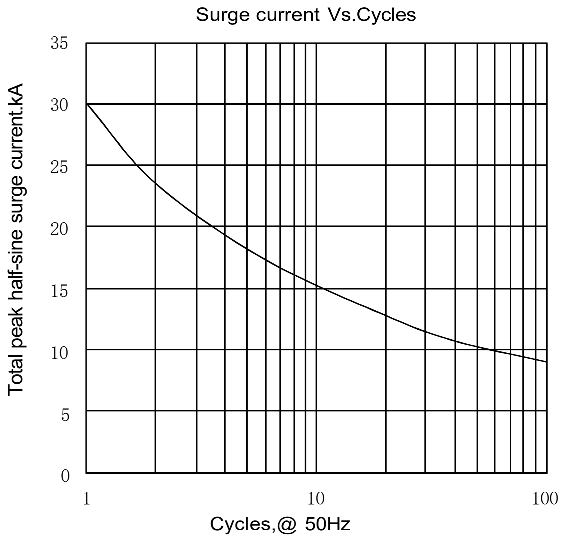


Fig.7

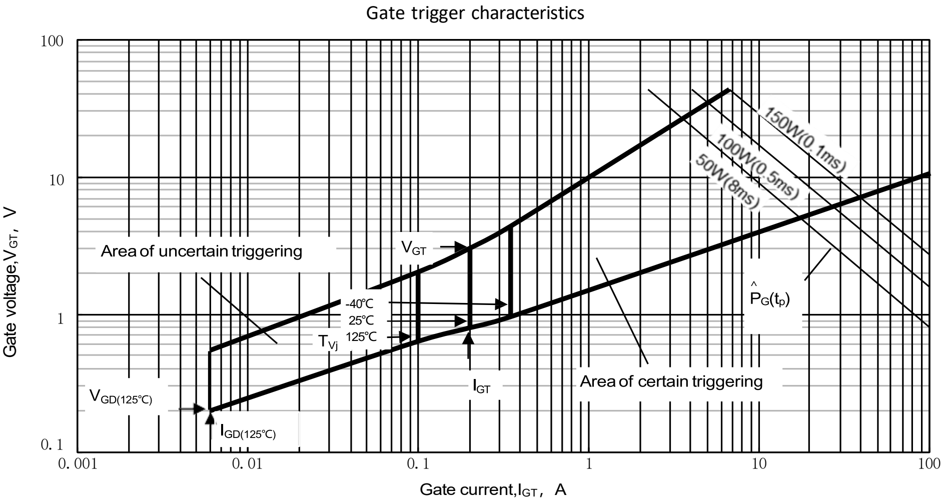
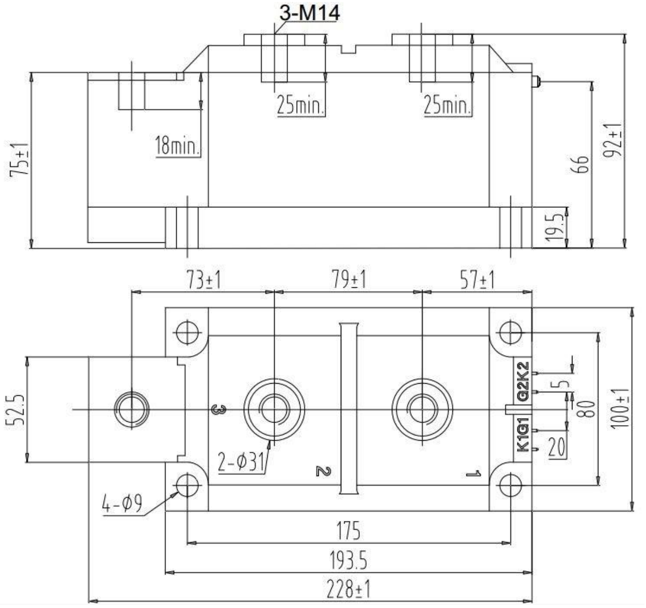
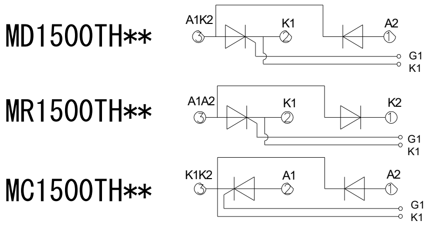


Fig.8

Outline:





Unmarked dimensional tolerance： ±0.5mm