Features :

- Isolated mounting base 2500V~
- 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
900V	800V	Mx400T80W
1100V	1000V	Mx400T100W
1300V	1200V	Mx400T120W
1500V	1400V	Mx400T140W
1700V	1600V	Mx400T160W
1900V	1800V	Mx400T180W

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(℃)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled,T_c=55℃	125			400	A
$I_{T(RMS)}$	RMS on-state current					628	A
V_{DRM}/V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	125	800		1800	V
I_{DRM}/I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			35	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=60%V_{RRM}	125			11	kA
I^2t	I^2t for fusing coordination					605	10^3A^2s
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slope resistance					0.80	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=1200A	25			1.90	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		200	mA
V_{GT}	Gate trigger voltage			1.0		3.0	V
I_H	Holding current			20		200	mA
V_{GD}	Non-trigger gate voltage	V_{DM}=67%V_{DRM}	125	0.2			V
I_{GD}	Non-trigger gate current	V_{DM}=67%V_{DRM}	125	1.5			mA
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled，per chip. DC				0.110	℃/W
$R_{th(c-w)}$	Thermal resistance case to water	Single side cooled，per chip. (5L/min)				0.056	℃/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(Max)		2500			V
F_m	Terminal connection torque(M8)			8.0		12.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		125	℃
T_{stg}	Stored temperature			-40		125	℃
T_{water}	Water temperature	Water flow=5L/min		-		30	℃
-	Water Pressure loss				21		kPa
W_t	Weight				1340		g
Outline	M13						

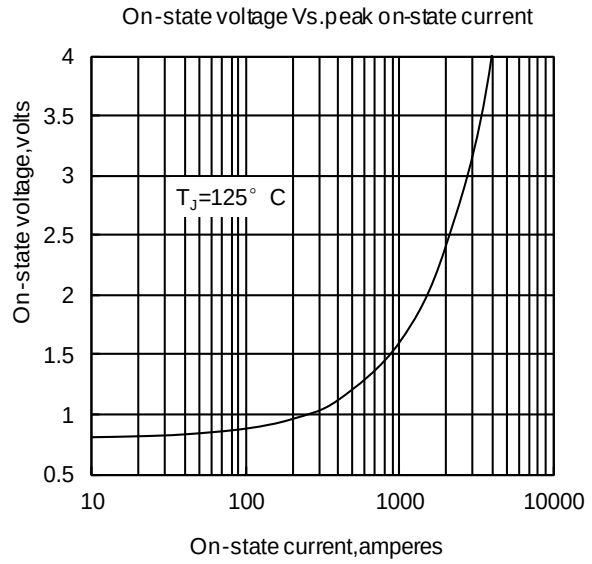


Fig1

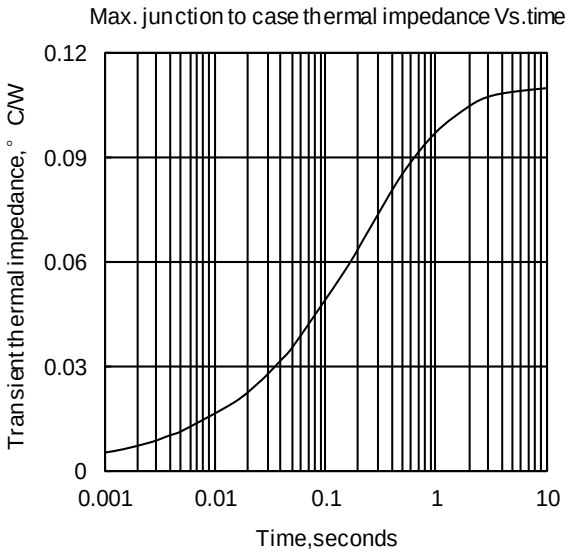


Fig2

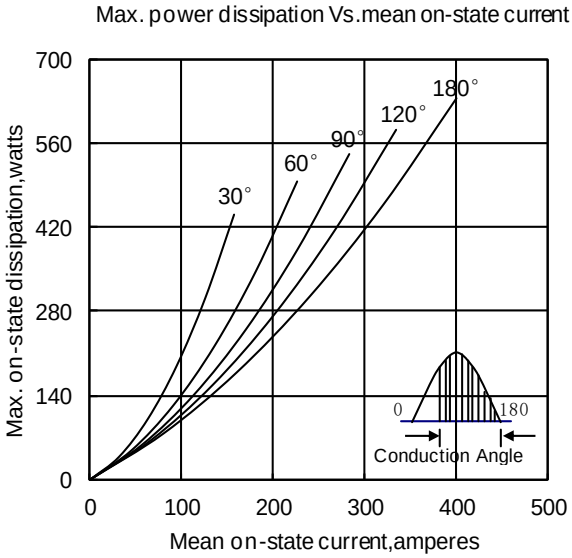


Fig3

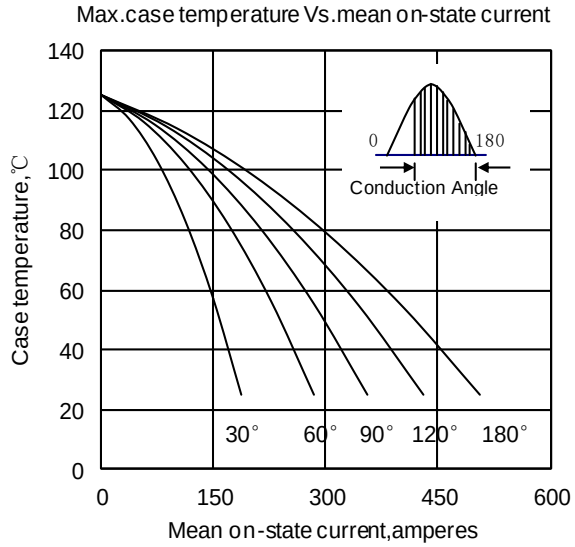


Fig4

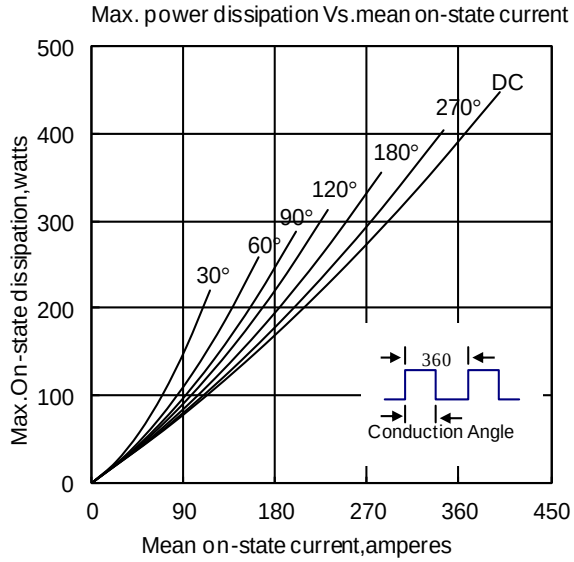


Fig5

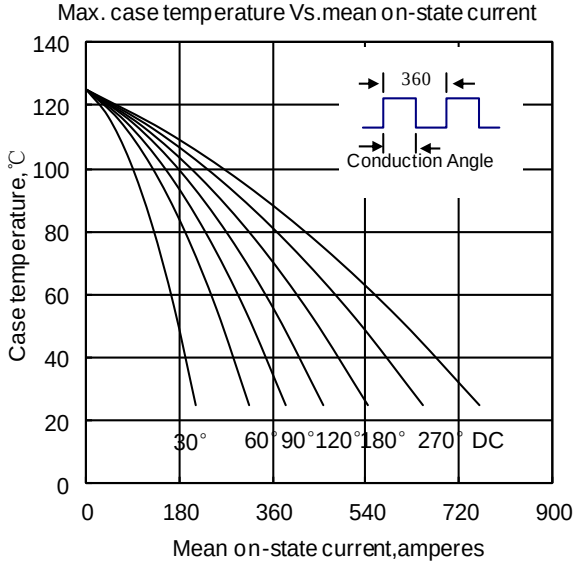


Fig6

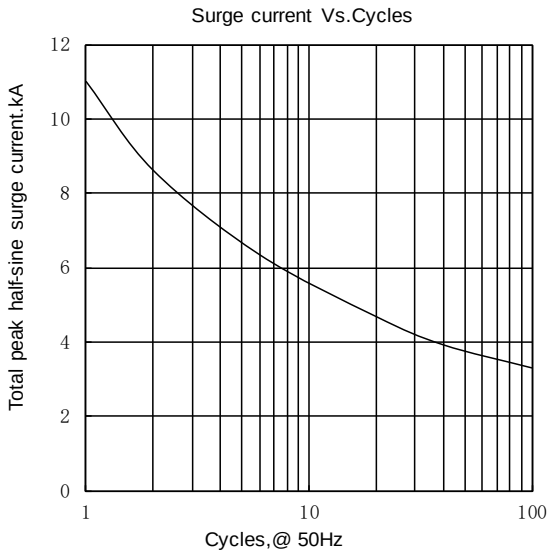


Fig.7

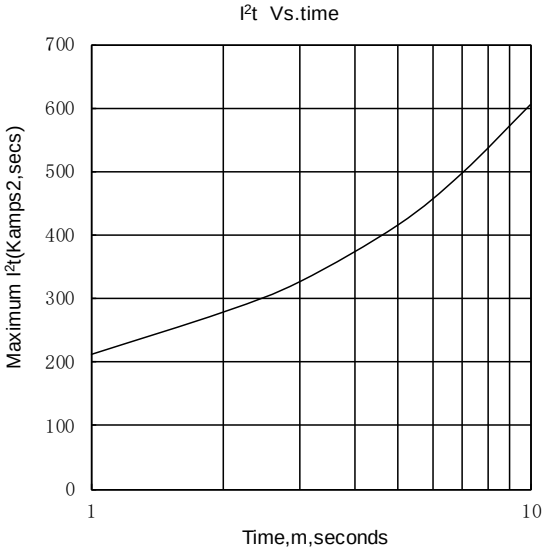


Fig.8

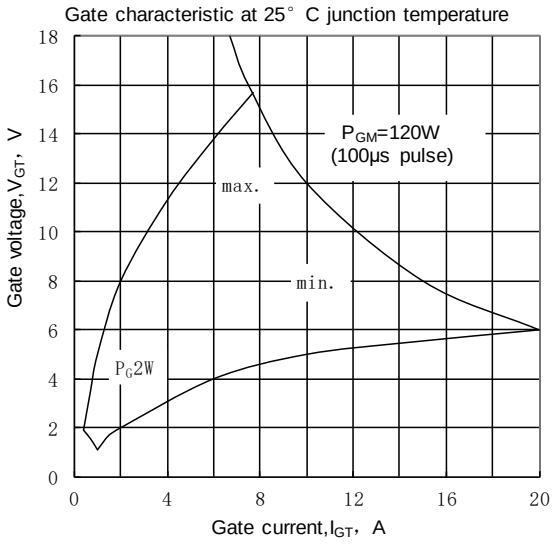


Fig.9

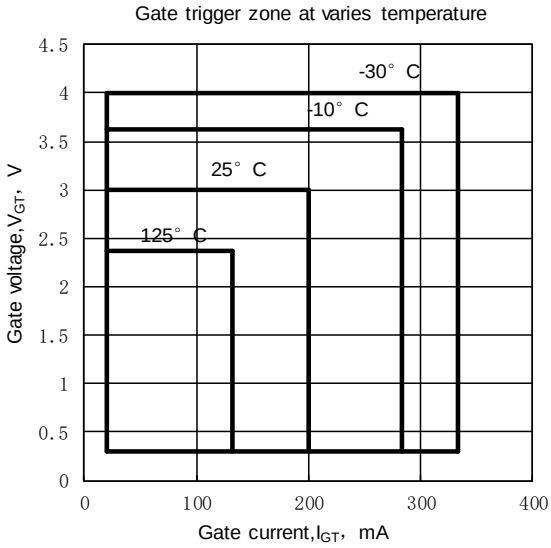


Fig.10

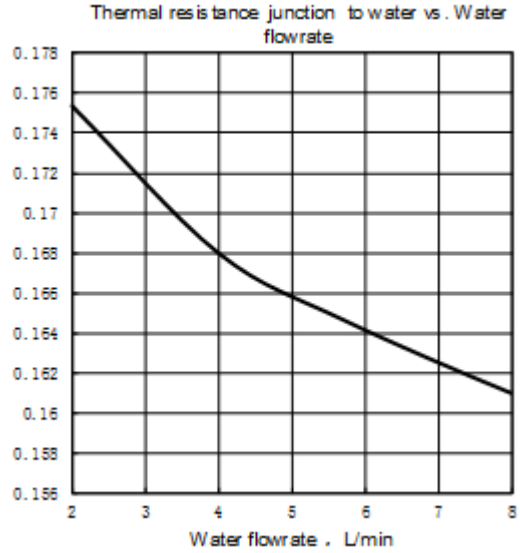


Fig.11

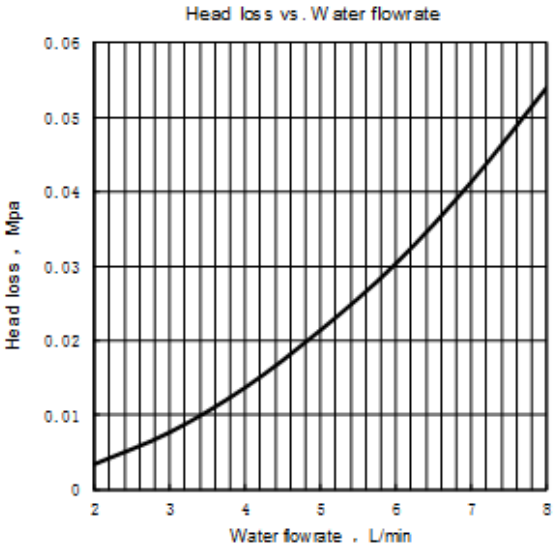
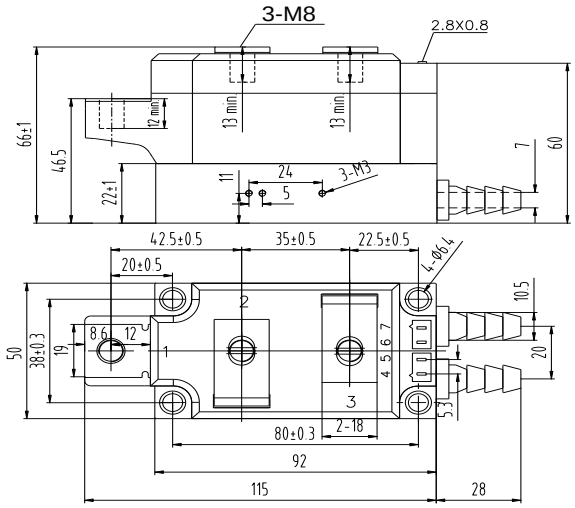


Fig.12



MD400T**W

MR400T**W

MC400T**W