Features：

- Isolated mounting base 2500V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Inverter
- Inductive heating
- Chopper

V_{DSM},V_{RSM}	V_{DRM},V_{RRM}	品名
2100V	2000V	Mx70TF200
2300V	2200V	Mx70TF220
2600V	2500V	Mx70TF250

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled,T_c=85°C	125			70	A
$I_{T(RMS)}$	RMS on-state current					110	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			30	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=60%V_{RRM}	125			1.40	kA
I^2t	I^2t for fusing coordination					9.80	A^2s*10^3
V_{TO}	Threshold voltage		125			1.50	V
r_T	On-state slope resistance					4.90	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=300A	25			3.20	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			200	A/μs
tq	Circuit commutated turn-off time	I_{TM}= 200A,tp=2000μs, V_R =50V dv/dt=30V/μs ,di/dt=-20A/μs	125	20		40	μs
t_{rr}	Reverse recovery time	I_{TM}=200A,tp=2000μs, -di/dt=20A/μs,V_R=50V	125		2		μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		180	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
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.230	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.040	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M6)			3.5		5.0	N·m
	Mounting torque(M6)				6.0		N·m
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g
Outline	M02						

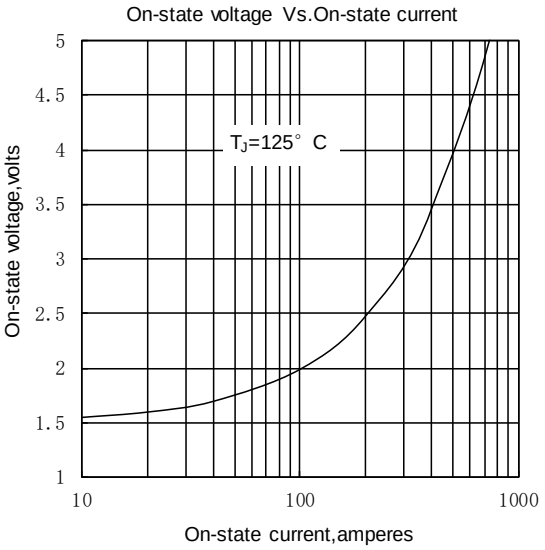


Fig.1

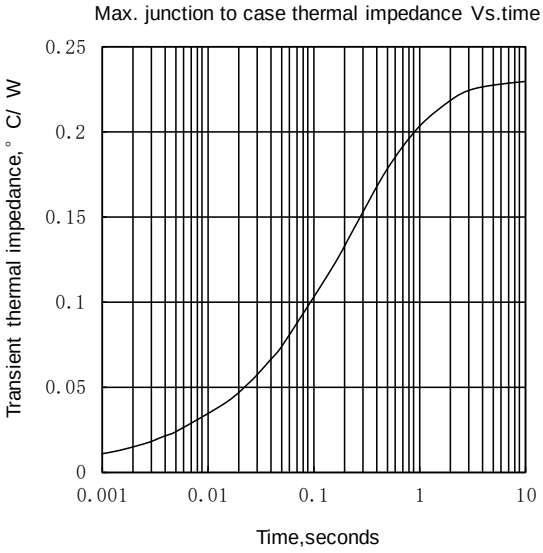


Fig.2

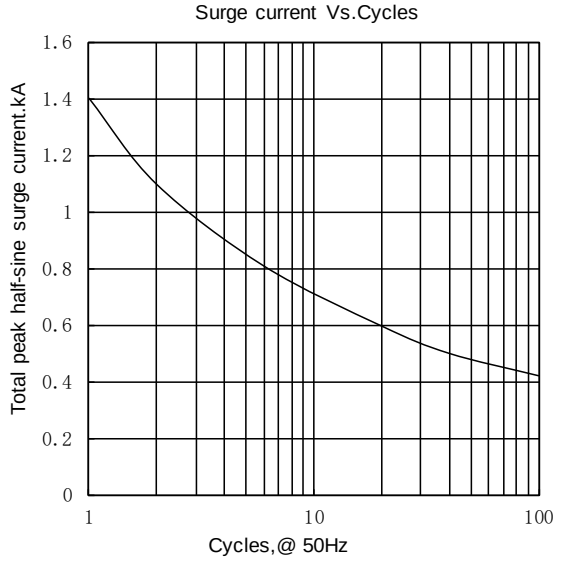


Fig.3

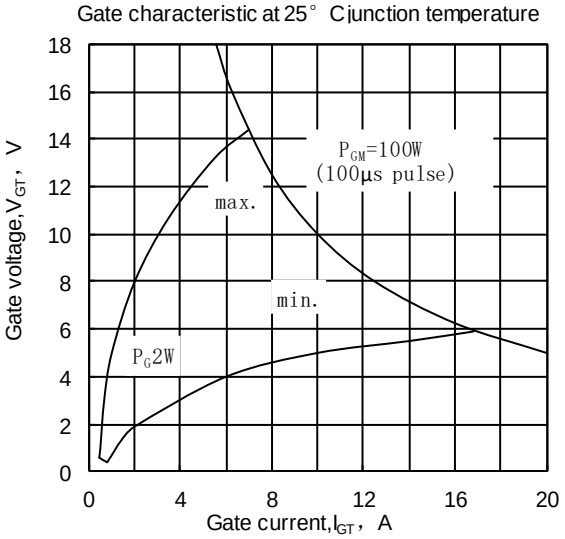


Fig.4

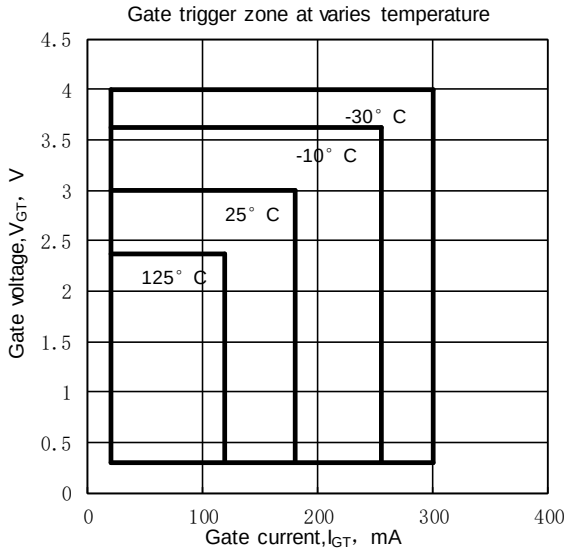
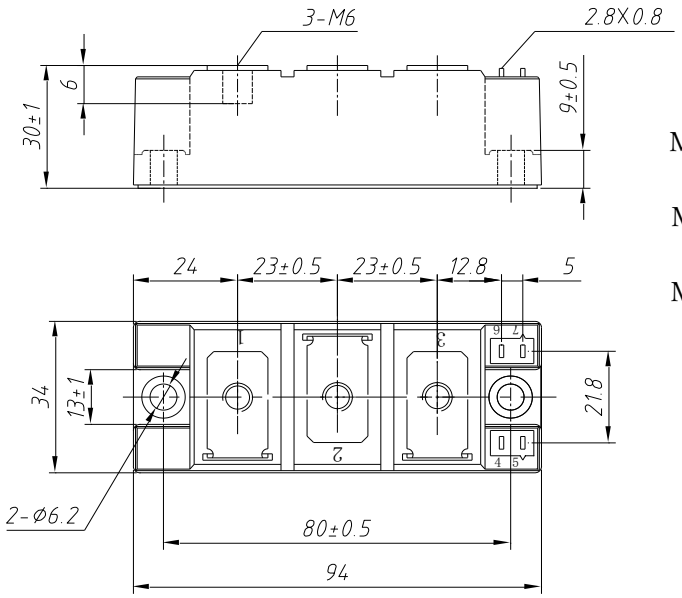


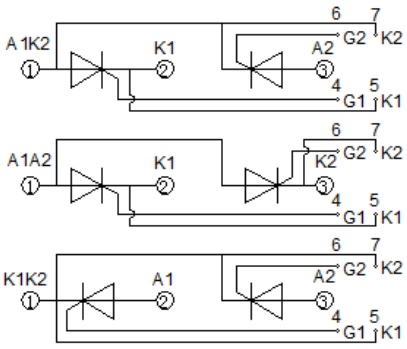
Fig.5



MD70TF**

MR70TF**

MC70TF**



Unmarked dimensional tolerance：±0.5mm