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

V_{DSM},V_{RSM}	V_{DRM},V_{RRM}	品名
2100V 2300V 2600V	2000V 2200V 2500V	Mx500T200W Mx500T220W Mx500T250W

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 water cooled,T_c=55°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			45	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=60%V_{RRM}	125			13	kA
I^2t	I^2t for fusing coordination					845	A^2s*10^3
V_{TO}	Threshold voltage		125			0.87	V
r_T	On-state slope resistance					0.78	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=1500A	25			2.15	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			0.8		3.0	V
I_H	Holding current			10		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.				0.073	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	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(M10)				12.0		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				1560		g
Outline	M14						

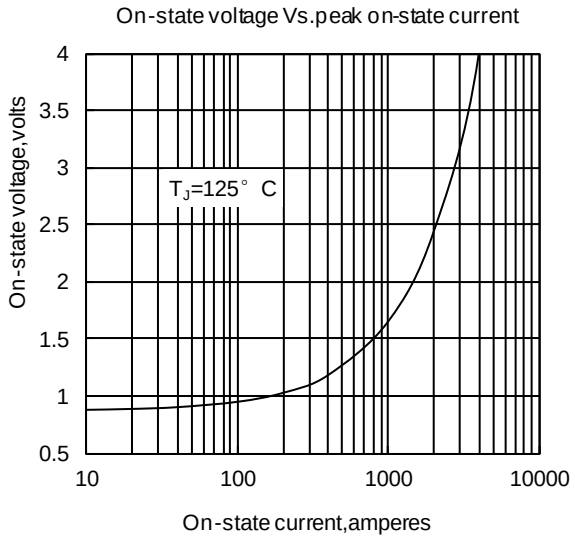


Fig1

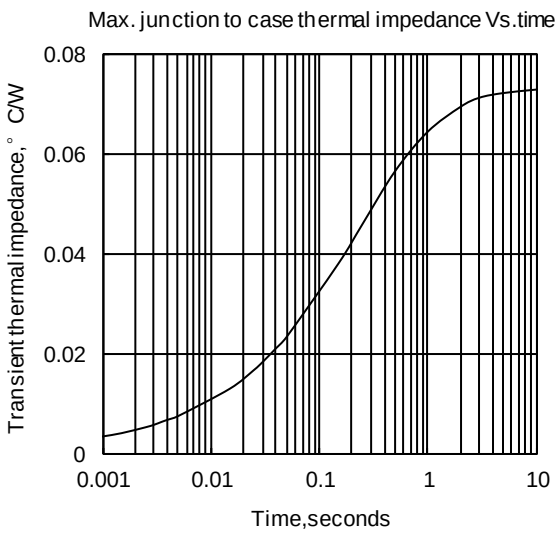


Fig2

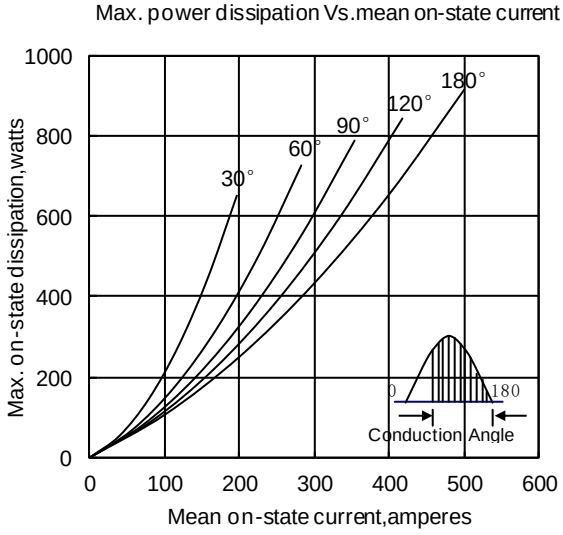


Fig3

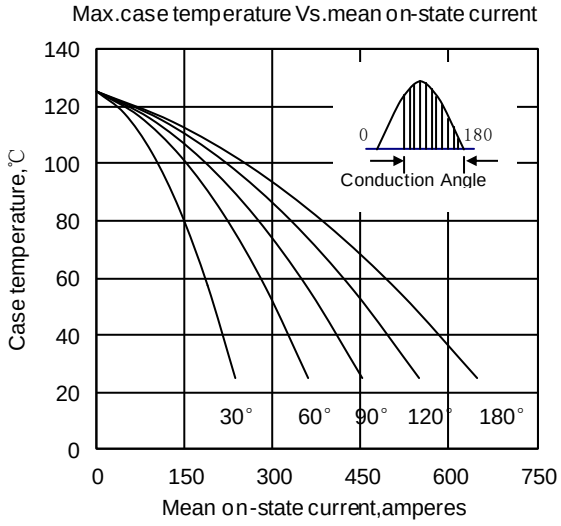


Fig4

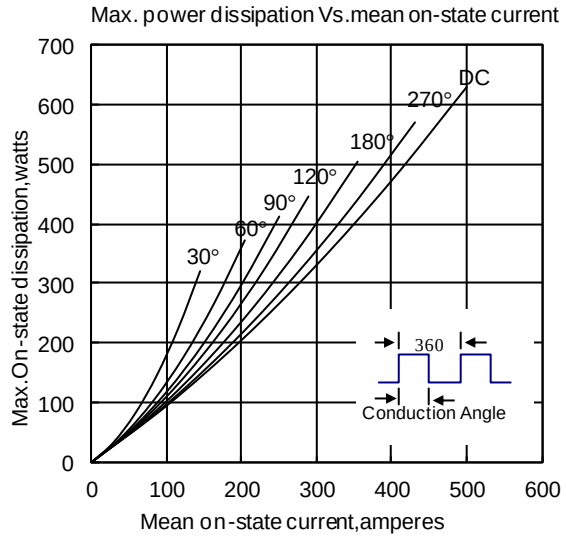


Fig5

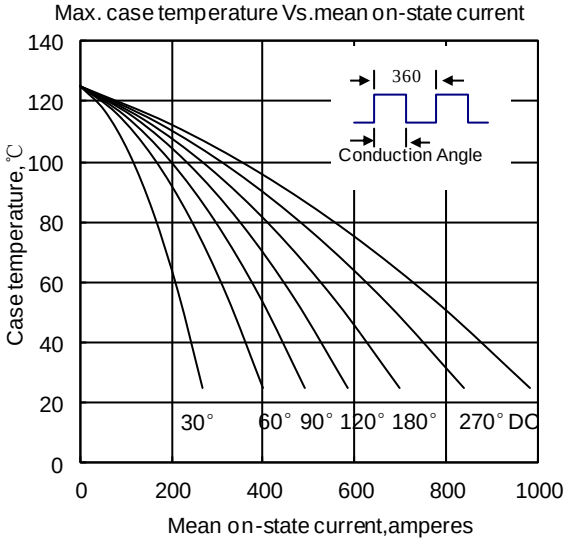


Fig6

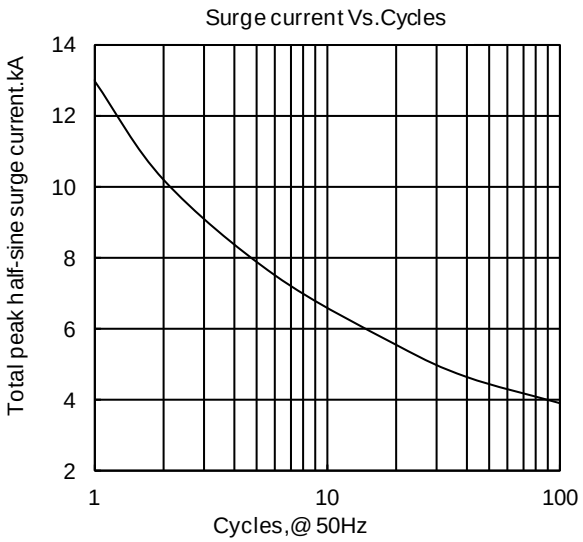


Fig7

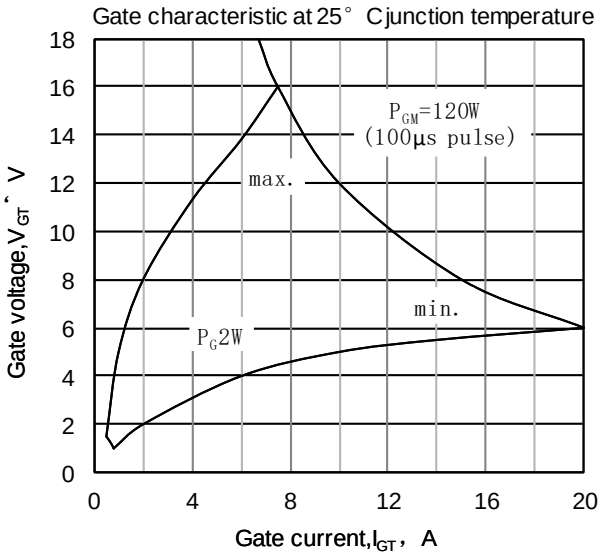


Fig8

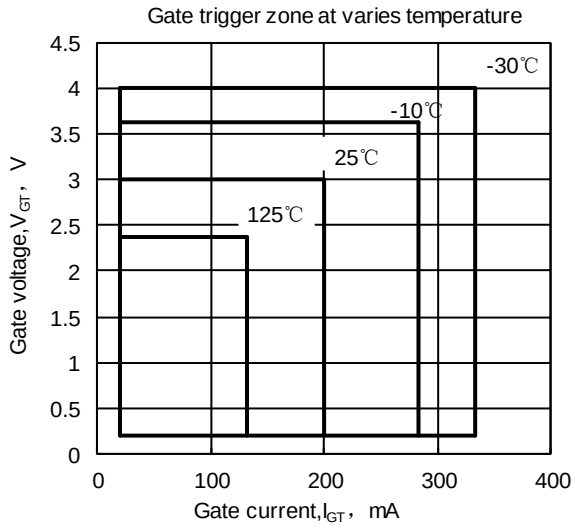
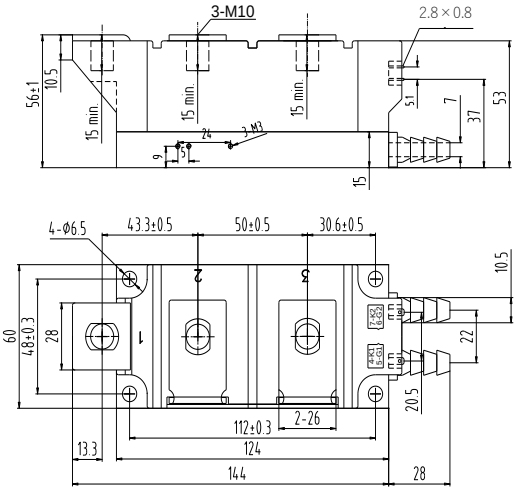


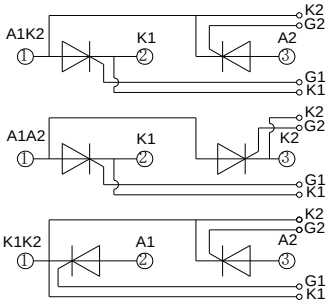
Fig9



MD500T**W

MR500T**W

MC500T**W



Unmarked dimensional tolerance：±0.5mm

NIps reserves the right to change specifications without notice.