

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

V_{DSM}, V_{RSM}	V_{DRM}, V_{RRM}	品名
2100V	2000V	Mx600T200
2300V	2200V	Mx600T220
2600V	2500V	Mx600T250

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_J(^\circ C)$	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^\circ C$	125			600	A
$I_{T(RMS)}$	RMS on-state current					942	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			50	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			16	kA
I^2t	I^2t for fusing coordination					1280	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.88	V
r_T	On-state slope resistance					0.24	$m\Omega$
V_{TM}	Peak on-state voltage	$I_{TM}=1800A$	25			1.65	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			1000	$V/\mu s$
di/dt	Critical rate of rise of on-state current	Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive	125			200	$A/\mu s$
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
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.054	$^\circ C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink	D.C. Single side cooled per chip				0.030	$^\circ C/W$
V_{iso}	Isolation voltage	50Hz,R.M.S., $t=1min, I_{iso}:1mA(MAX)$		3000			V
F_m	Terminal connection torque (M12)				14.0		$N\cdot m$
	Mounting torque (M8)				12.0		$N\cdot m$
T_{vj}	Junction temperature			-40		125	$^\circ C$
T_{stg}	Stored temperature			-40		125	$^\circ C$
W_t	Weight				3240		g
Outline		M07					

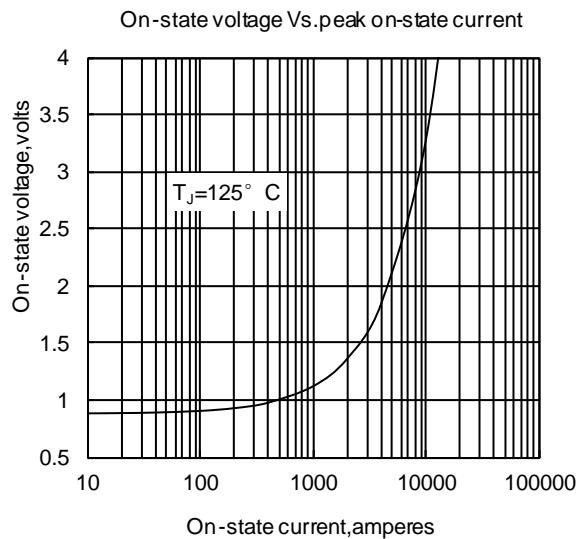


Fig. 1

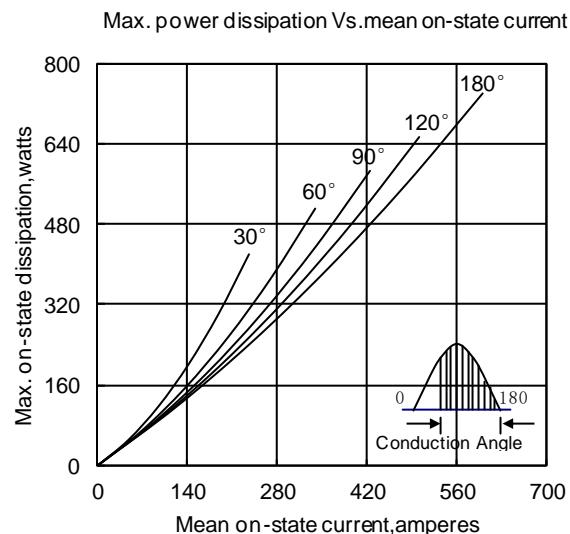


Fig. 3

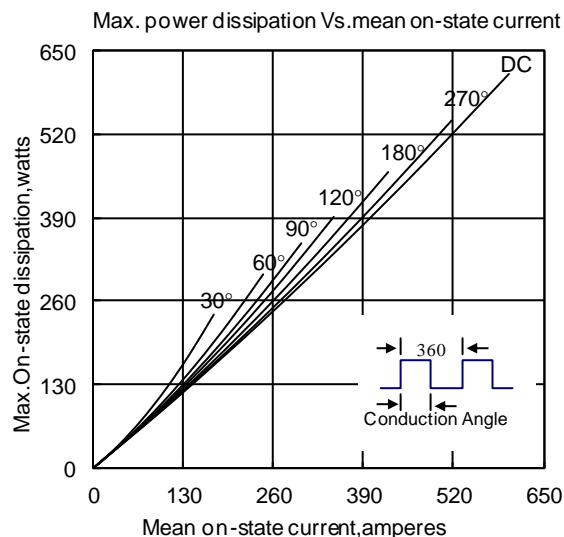


Fig. 5

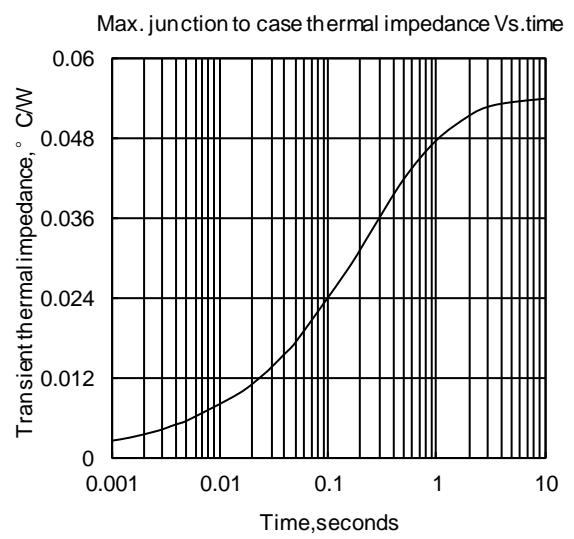


Fig. 2

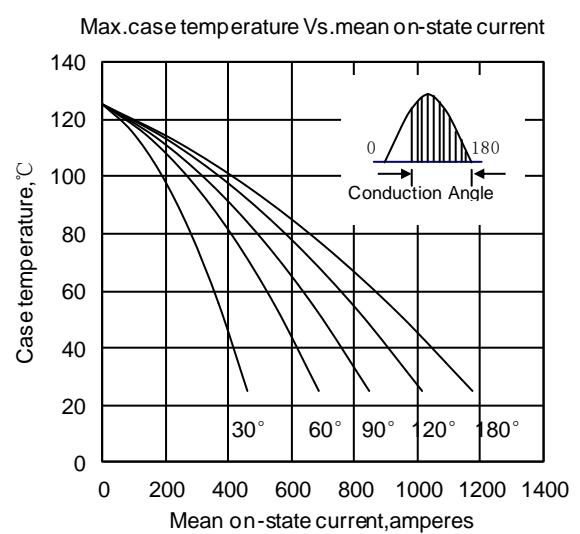


Fig. 4

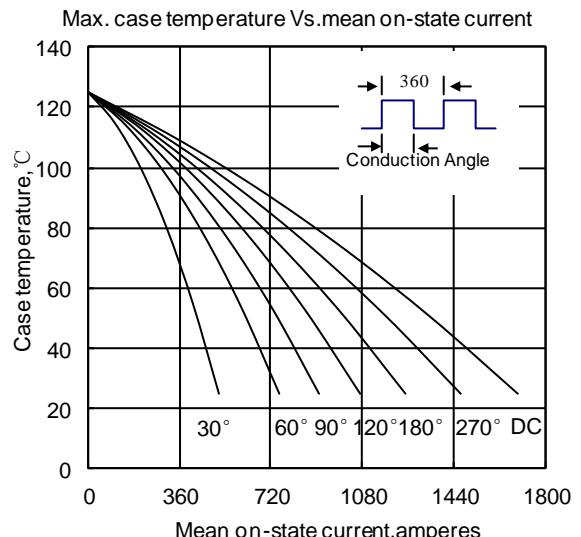


Fig. 6

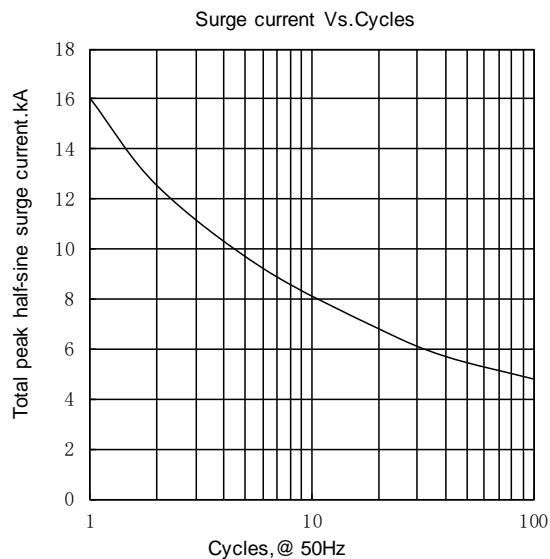


Fig.7

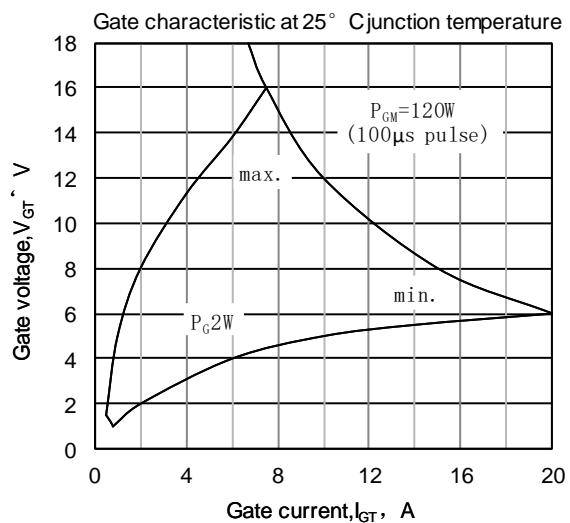


Fig8

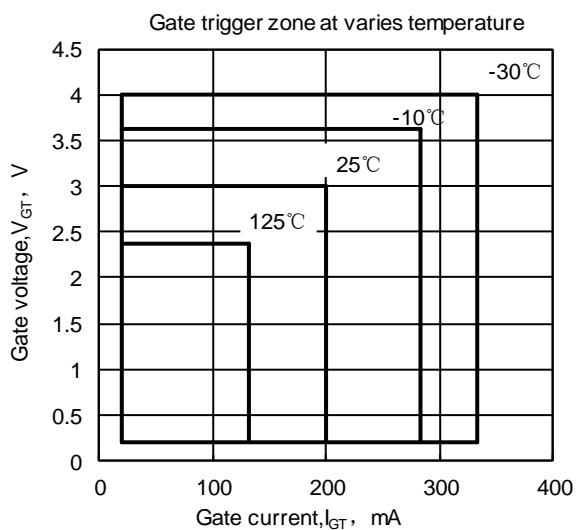
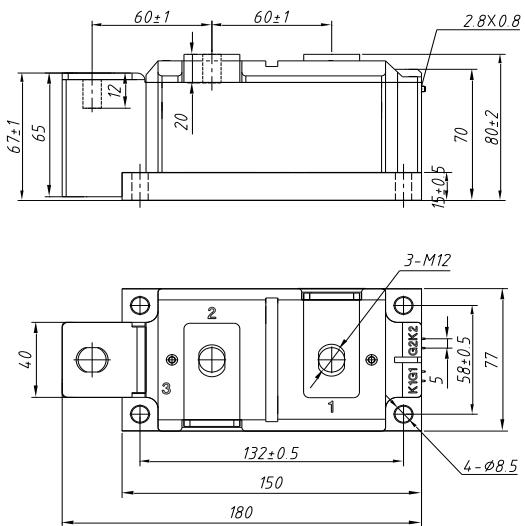


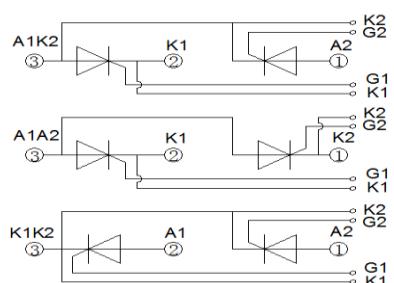
Fig9



MD600T**

MR600T**

MC600T**

Unmarked dimensional tolerance : $\pm 0.5\text{mm}$