

**Features:**

- Isolated mounting base 4000V~
- 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
2700V	2600V	Mx200TH260C
2900V	2800V	Mx200TH280C
3100V	3000V	Mx200TH300C
3300V	3200V	Mx200TH320C
3500V	3400V	Mx200TH340C
3700V	3600V	Mx200TH360C

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, $T_C=85^\circ C$	125			200	A
$I_{T(RMS)}$	RMS on-state current					314	A
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	125			40	mA
$I_{TSM}$	Surge on-state current			125		6	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=60\%V_{RRM}, t=10ms$ half sine	125			180	$10^3 A^2 s$
$V_{TO}$	Threshold voltage			125		0.96	V
$r_T$	On-state slope resistance					1.30	$m\Omega$
$V_{TM}$	Peak on-state voltage			25		2.10	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 $t \leq 0.5\mu s$ Repetitive	125			200	$A/\mu s$
$I_{GT}$	Gate trigger current	$V_A=12V, I_A=1A$	25	30		180	mA
$V_{GT}$	Gate trigger voltage			0.8		2.5	V
$I_H$	Holding current			10		200	mA
$I_L$	Latching current					1000	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				0.12	$^\circ C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.04	$^\circ C/W$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, $t=1min$ , $I_{iso}:1mA$ (MAX)		4000			V
$F_m$	Terminal connection torque(M8)			10.0		12.0	$N\cdot m$
	Mounting torque(M6)			4.5		6.0	$N\cdot m$
$T_{vj}$	Junction temperature			-40		125	$^\circ C$
$T_{stg}$	Stored temperature			-40		125	$^\circ C$
$W_t$	Weight				770		g
Outline	M03						

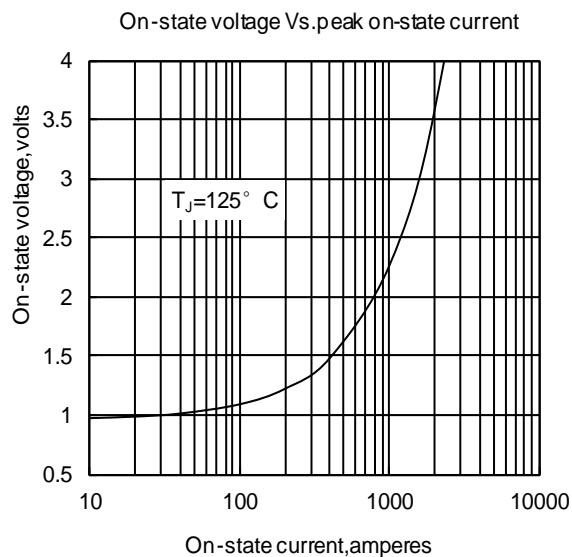


Fig. 1

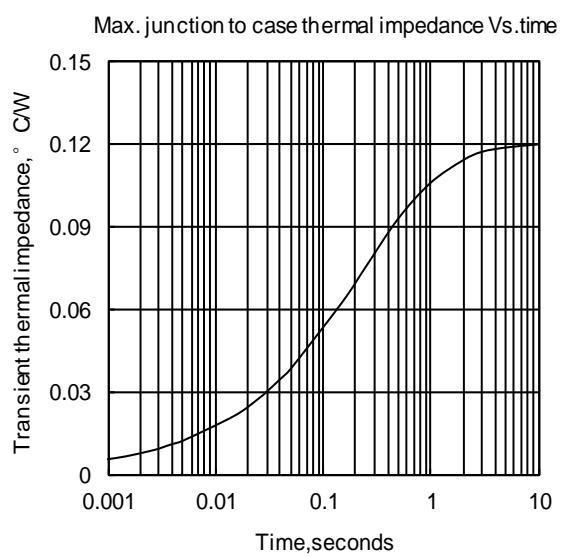


Fig. 2

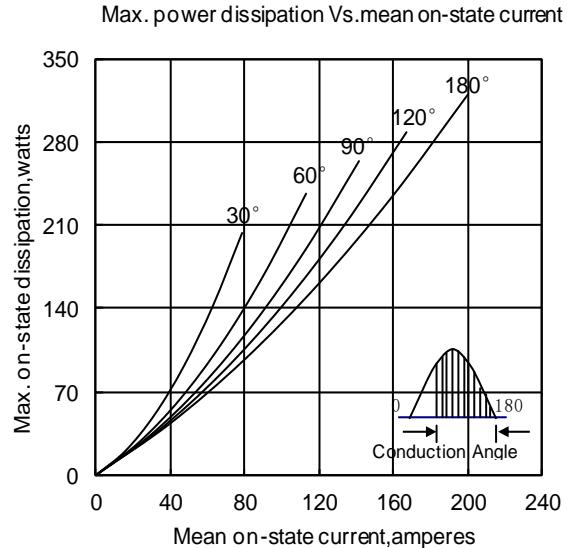


Fig. 3

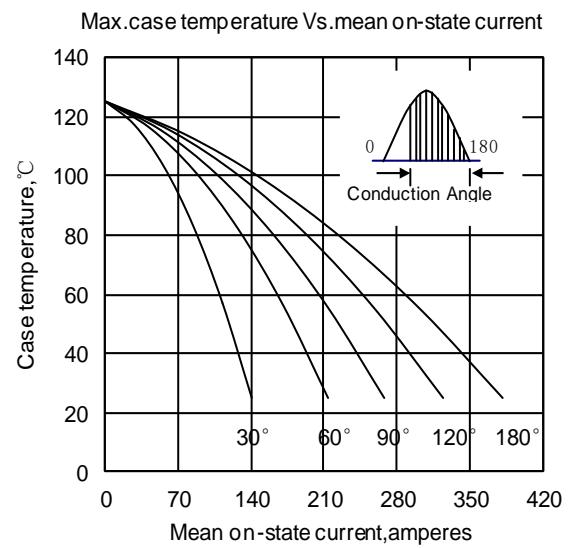


Fig. 4

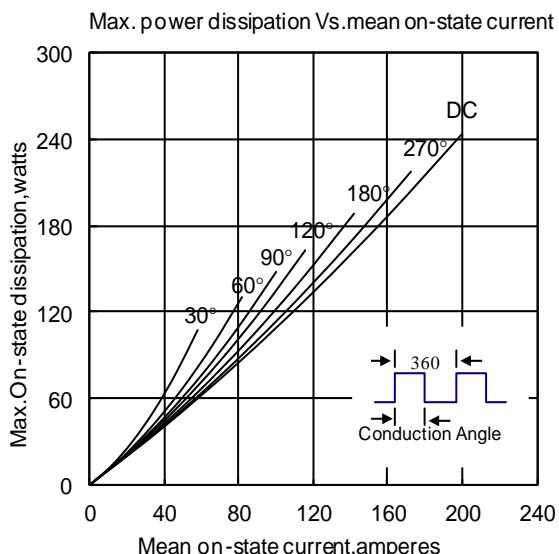


Fig. 5

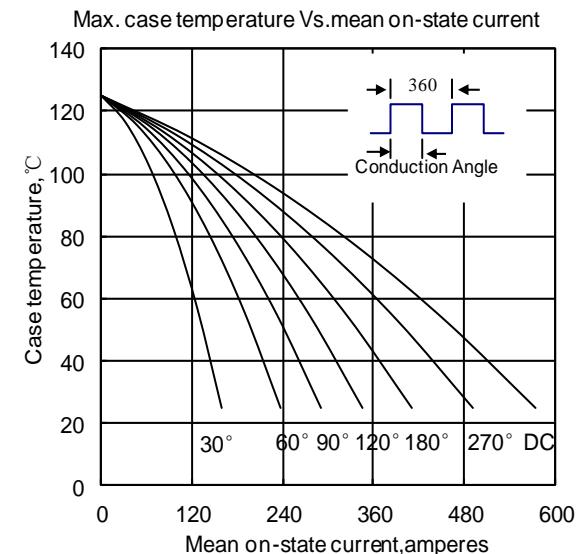


Fig. 6

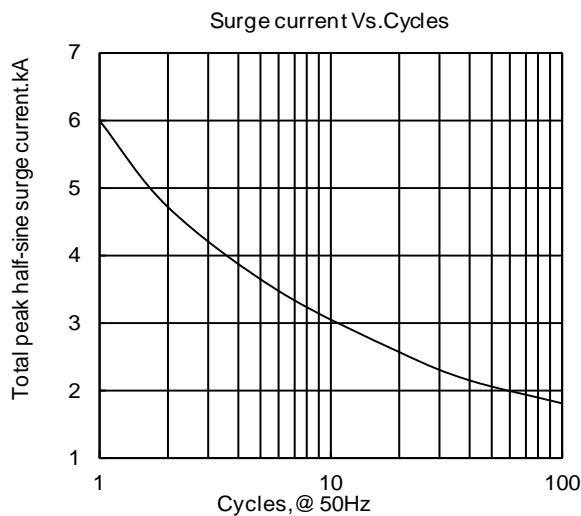


Fig. 7

Gate trigger characteristics

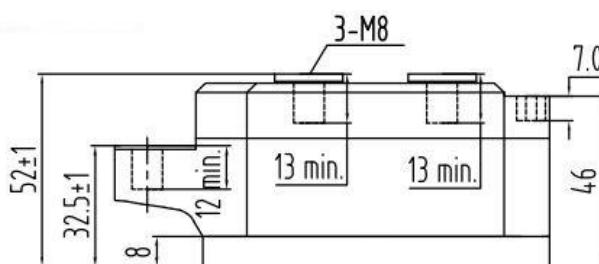
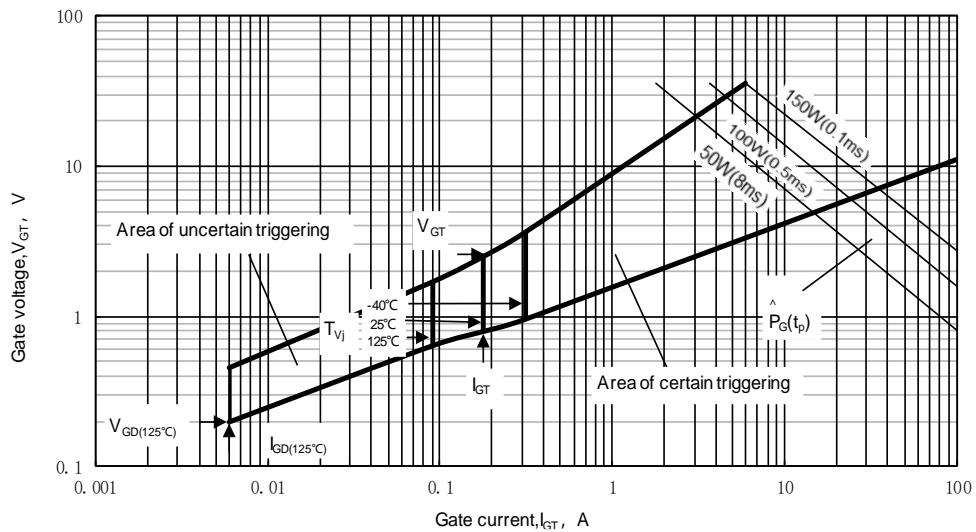
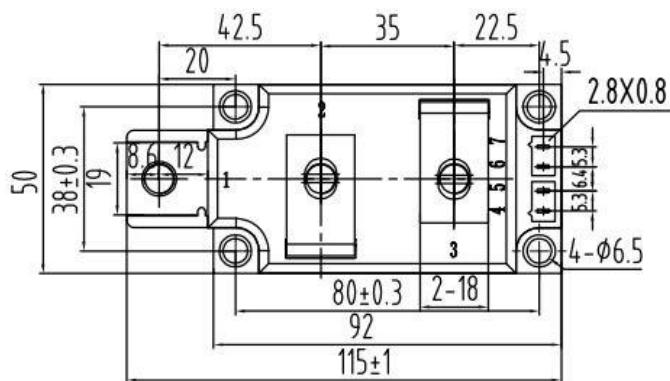
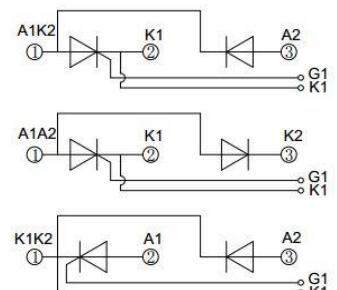


Fig 8

MD200TH\*\*C

MR200TH\*\*C

MC200TH\*\*C



Unmarked dimensional tolerance : ±0.5mm

NIps reserves the right to change specifications without notice.