



### 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

$V_{DSM}, V_{RSM}$	$V_{DRM}, V_{RRM}$	Type & Outline
900V	800V	MTx26-08-223F3B
1100V	1000V	MTx26-10-223F3B
1300V	1200V	MTx26-12-223F3B
1500V	1400V	MTx26-14-223F3B
1700V	1600V	MTx26-16-223F3B
1900V	1800V	MTx26-18-223F3B

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_i(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^{\circ}\text{C}$	125			26	A
$I_{T(RMS)}$	RMS on-state current		125			41	A
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	125			8	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			0.5	KA
$I^2t$	$I^2T$ for fusing coordination					1.25	$\text{A}^2\text{s} \times 10^3$
$V_{TO}$	Threshold voltage		125			0.85	V
$r_T$	On-state slop resistance					9.68	$\text{m}\Omega$
$V_{TM}$	Peak on-state voltage	$I_{TM}=80\text{A}$		25		1.69	V
$dv/dt$	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			1000	$\text{V}/\mu\text{s}$
$di/dt$	Critical rate of rise of on-state current	Gate source 1.5A $t \leq 0.5\mu\text{s}$ Repetitive	125			200	$\text{A}/\mu\text{s}$
$I_{GT}$	Gate trigger current	$V_A=12\text{V}$ , $I_A=1\text{A}$	25	30		100	mA
$V_{GT}$	Gate trigger voltage			0.8		2.5	V
$I_H$	Holding current			20		120	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	Single side cooled per chip				0.950	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.2	$^{\circ}\text{C}/\text{W}$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$ , $I_{iso}=1\text{mA}(\text{MAX})$	3000				V
$F_m$	Thermal connection torque(M5)				4.0		$\text{N}\cdot\text{m}$
	Mounting torque(M6)				6.0		$\text{N}\cdot\text{m}$
$T_{stg}$	Stored temperature		-40			125	$^{\circ}\text{C}$
$W_t$	Weight				160		g
Outline		223F3B					

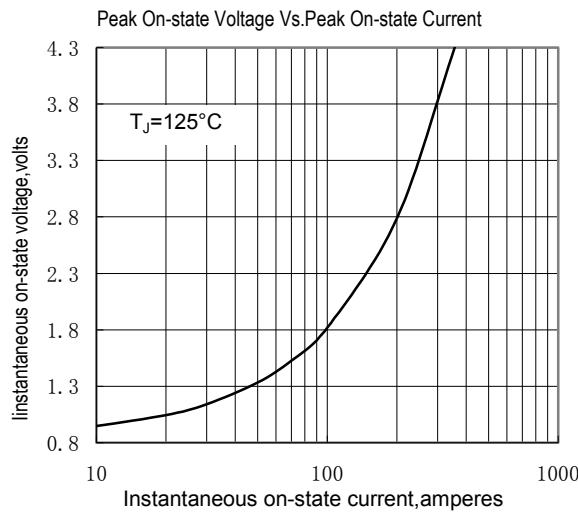


Fig.1

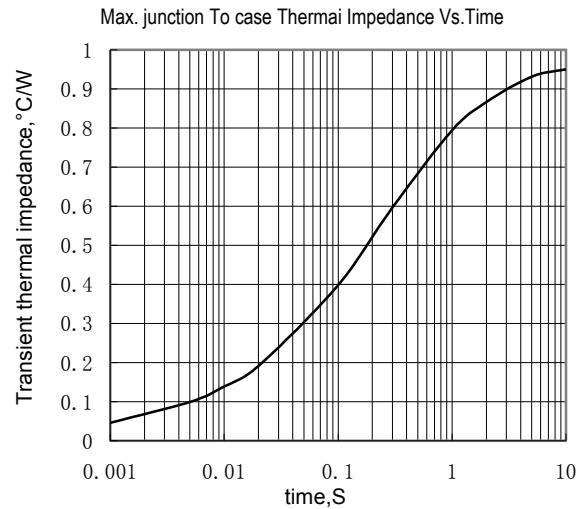


Fig.2

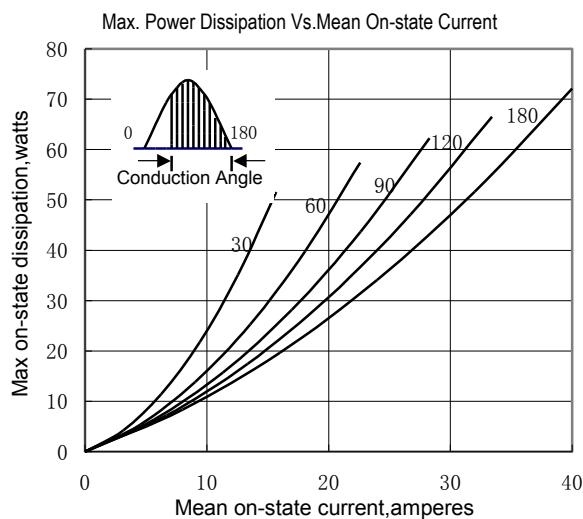


Fig.3

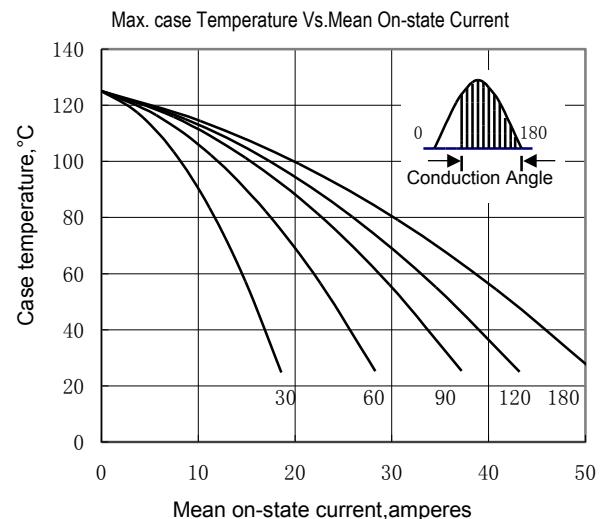


Fig.4

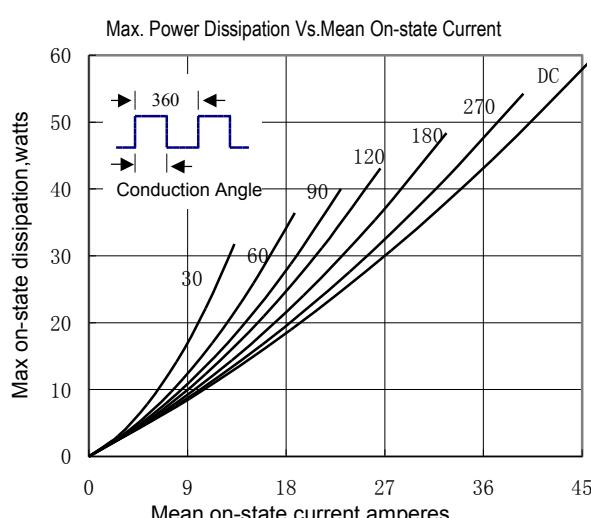


Fig.5

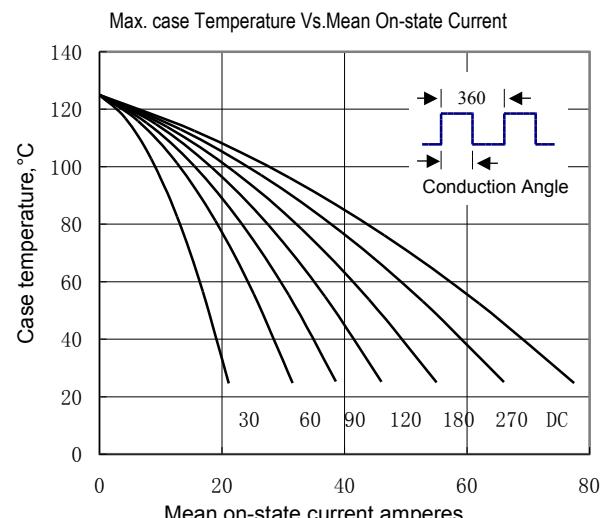


Fig.6

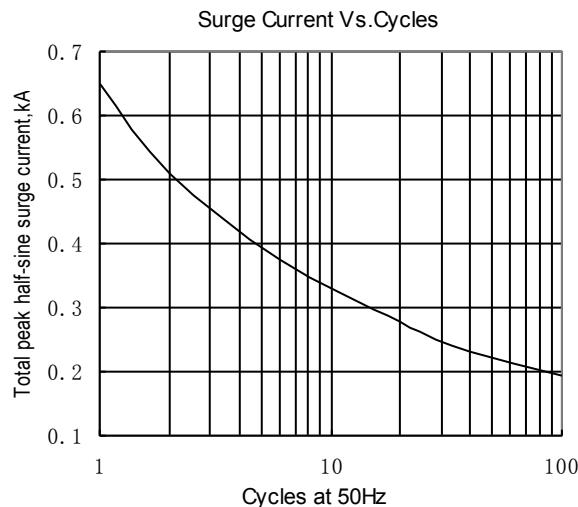


Fig.7

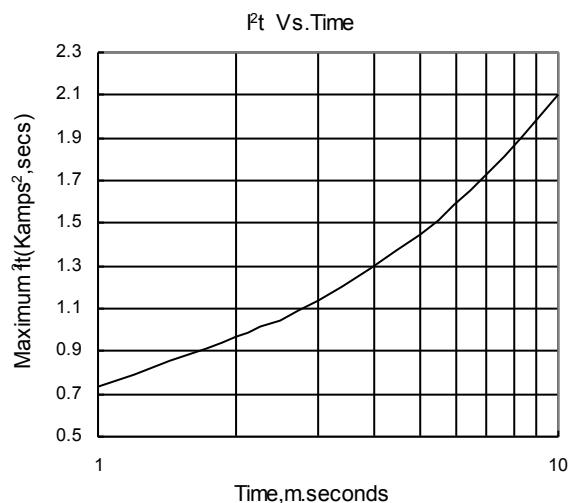


Fig.8

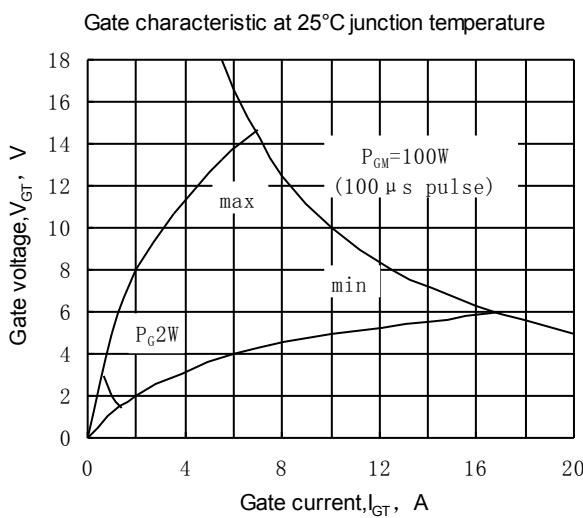


Fig.9

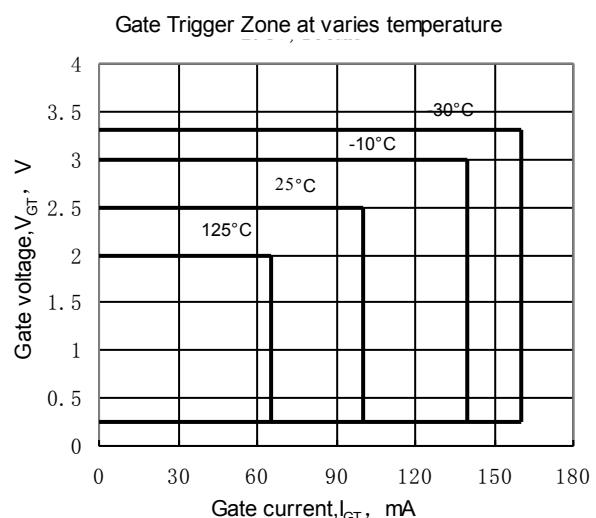


Fig.10

## Outline:

