

**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

$V_{DSM}, V_{RSM}$	$V_{DRM}, V_{RRM}$	Type
2700V	2600V	Mx300T260
2900V	2800V	Mx300T280
3100V	3000V	Mx300T300
3300V	3200V	Mx300T320
3500V	3400V	Mx300T340
3700V	3600V	Mx300T360

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j$ (°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			300	A
$I_{T(RMS)}$	RMS on-state current					471	A
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	125			55	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			9.2	kA
$I^2t$	$I^2t$ for fusing coordination					423.2	$\text{A}^2\text{s} \times 10^3$
$V_{TO}$	Threshold voltage		125			0.93	V
$r_T$	On-state slope resistance					1.00	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM}=900\text{A}$	25			2.45	V
$dv/dt$	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			1000	V/μs
$di/dt$	Critical rate of rise of on-state current	$I_{TM}=600\text{A}$ , Gate source 1.5A $t_r \leq 0.5\mu\text{s}$ Repetitive	125			200	A/μs
$I_{GT}$	Gate trigger current	$V_A=12\text{V}$ , $I_A=1\text{A}$	25	30		180	mA
$V_{GT}$	Gate trigger voltage			0.8		2.5	V
$I_H$	Holding current			10		150	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				0.08	$^\circ\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heat sink	Single side cooled per chip				0.04	$^\circ\text{C}/\text{W}$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$ , $I_{iso}: 1\text{mA}(\text{MAX})$		4000			V
$F_m$	Terminal connection torque (M10)				12.0		N-m
	Mounting torque (M6)				6.0		N-m
$T_{vj}$	Junction temperature			-40		125	$^\circ\text{C}$
$T_{stg}$	Stored temperature			-40		125	$^\circ\text{C}$
$W_t$	Weight				1275		g
Outline	M05						

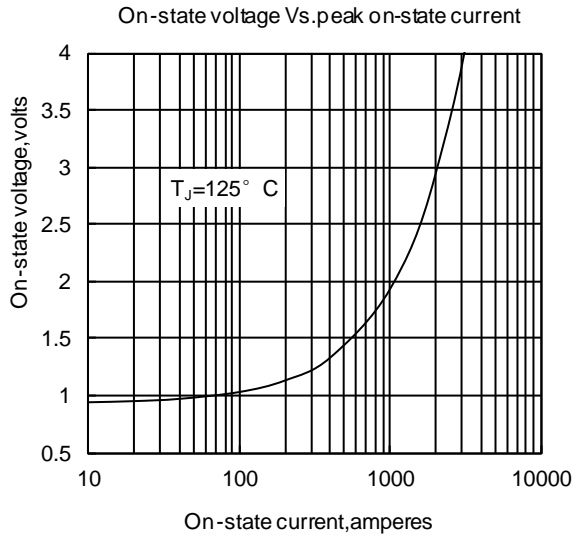


Fig. 1

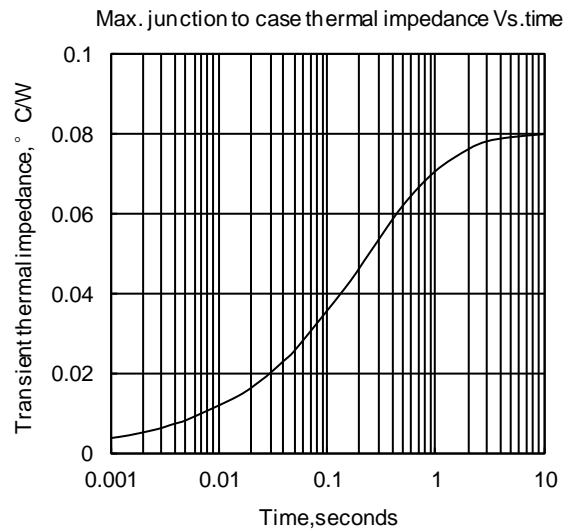


Fig. 2

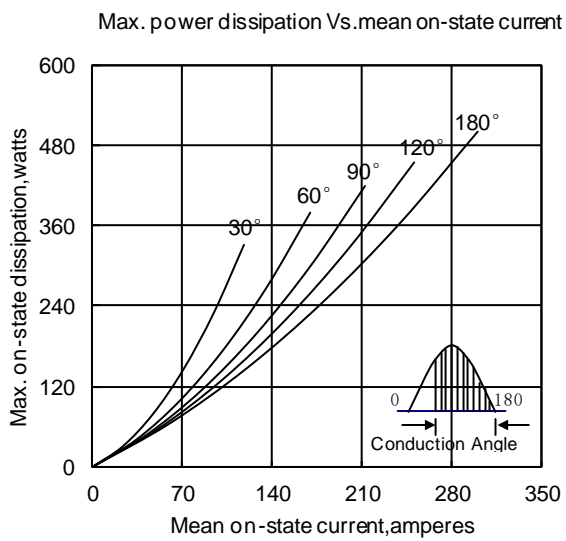


Fig. 3

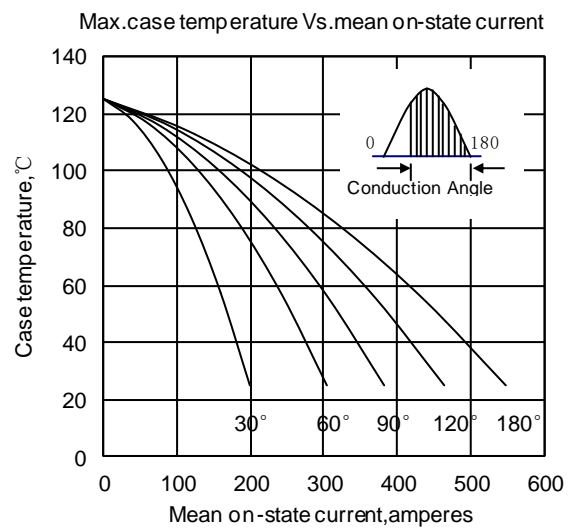


Fig. 4

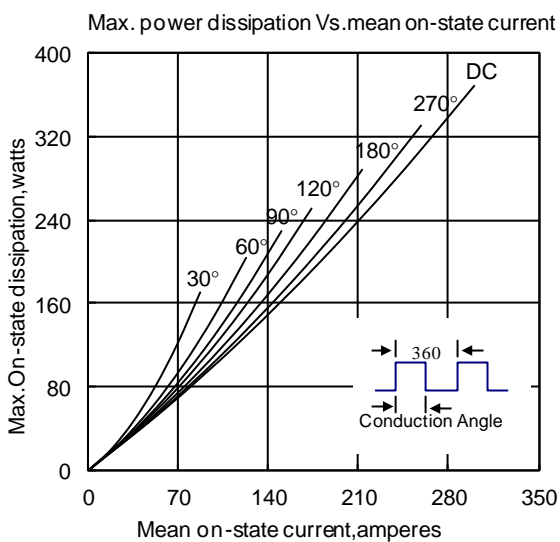


Fig. 5

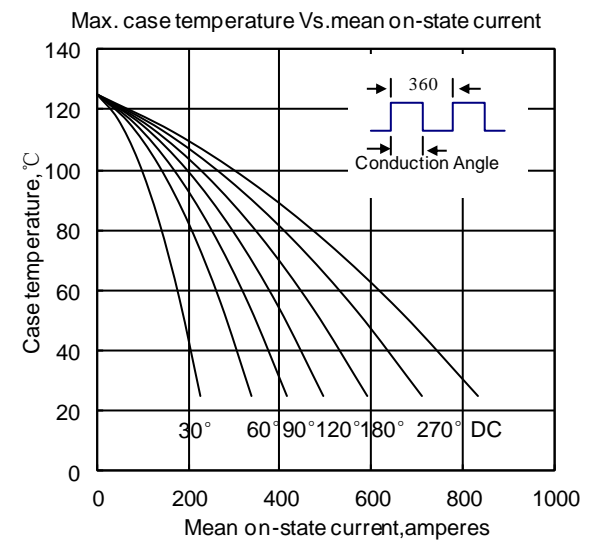


Fig. 6

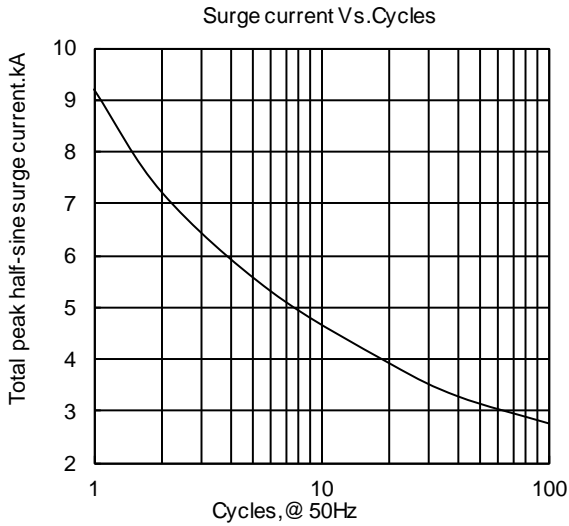


Fig. 7

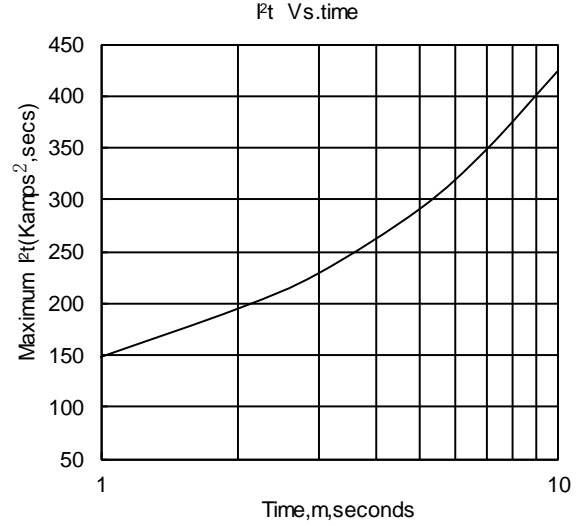


Fig. 8

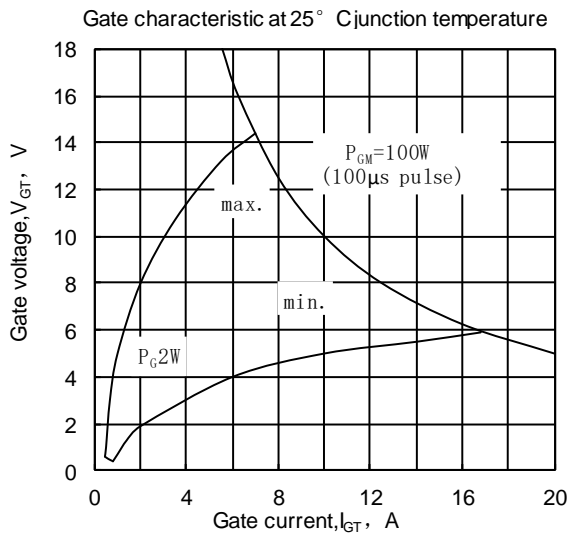


Fig. 9

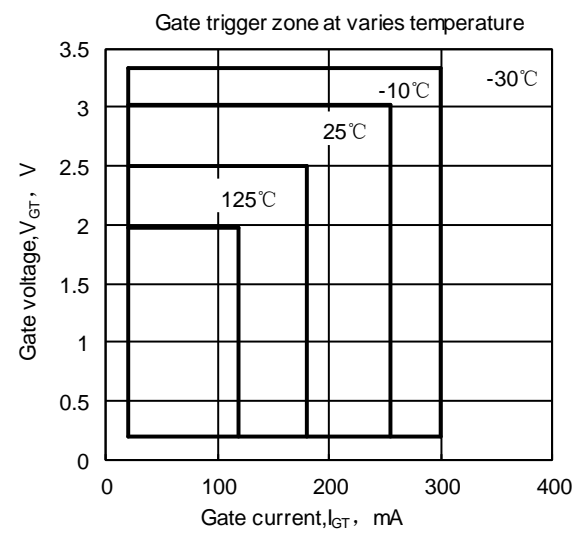


Fig. 10

Outline:

