

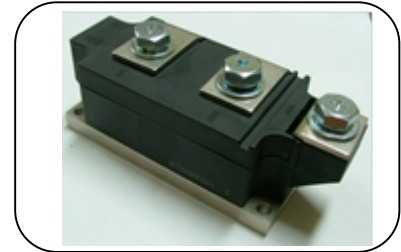
### Features :

- Isolated mounting base 4500V~
- Pressure contact technology with  
Increased power cycling capability
- Space and weight savings

### Typical Applications

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$             **400A**  
 $V_{DRM}/V_{RRM}$     **2600~3600V**  
 $I_{TSM}$                  **$12.5A \times 10^3$**   
 $I^2t$                      **$781A^2 S \cdot 10^3$**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, T <sub>c</sub> =85°C	125			400	A
$I_{T(RMS)}$	RMS on-state current		125			628	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} & V_{RRM}$ tp=10ms $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 100V$ respectively	125	2600		3600	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	125			50	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave	125			12.5	KA
$I^2t$	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =60%V <sub>RRM</sub>					781
$V_{TO}$	Threshold voltage		125			0.98	V
$r_T$	On-state slop resistance						0.88
$V_{TM}$	Peak on-state voltage	I <sub>TM</sub> =1200A	25			2.35	V
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A t <sub>r</sub> ≤ 0.5μs Repetitive	125			100	A/μs
$I_{GT}$	Gate trigger current		25	30		200	mA
$V_{GT}$	Gate trigger voltage	V <sub>A</sub> =12V, I <sub>A</sub> =1A		1.0		3.0	V
$I_H$	Holding current			20		200	mA
$V_{GD}$	Non-trigger gate voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.054	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.024	°C /W
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> : 1mA(MAX)		4500			V
$F_m$	Thermal connection torque(M10)				12.0		N·m
	Mounting torque(M6)				6.0		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				1500		g
Outline	416F3						

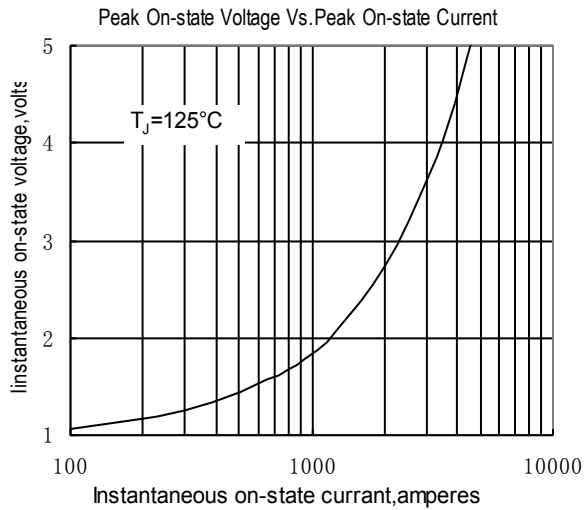


Fig.1

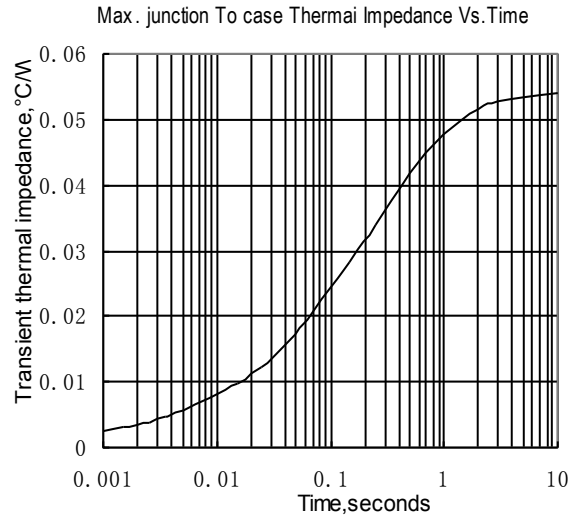


Fig.2

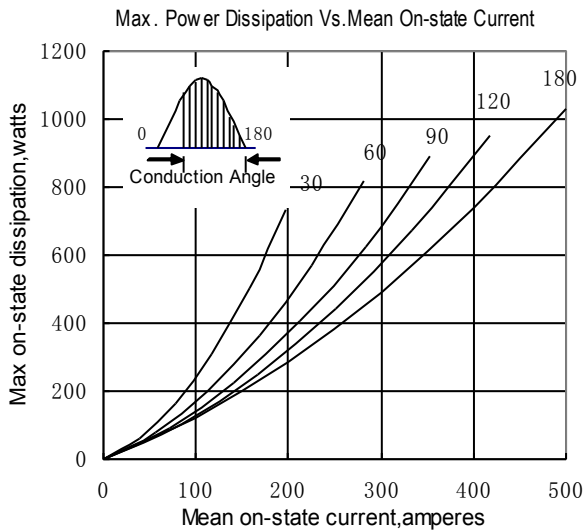


Fig.3

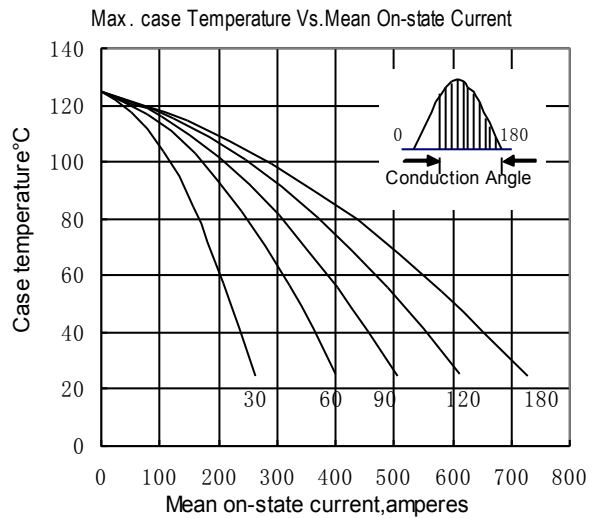


Fig.4

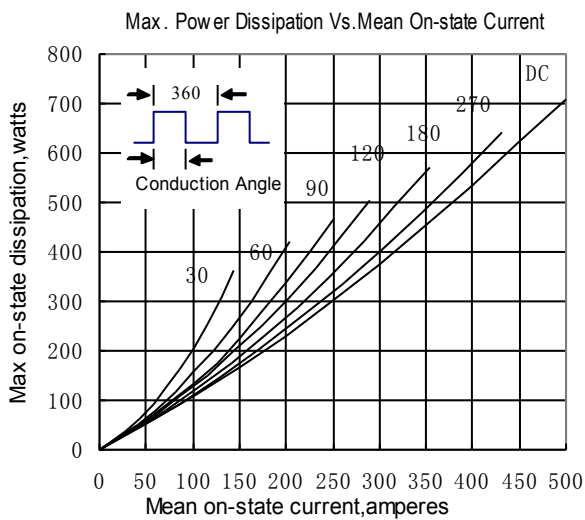


Fig.5

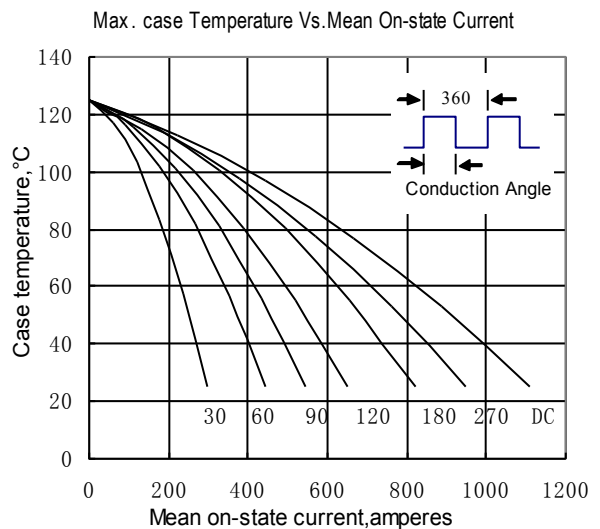


Fig.6

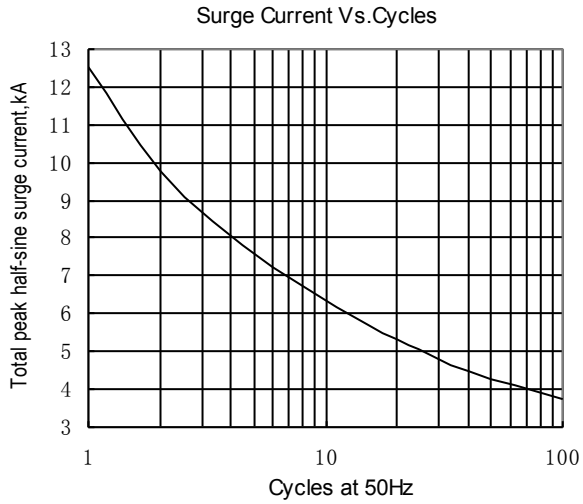


Fig.7

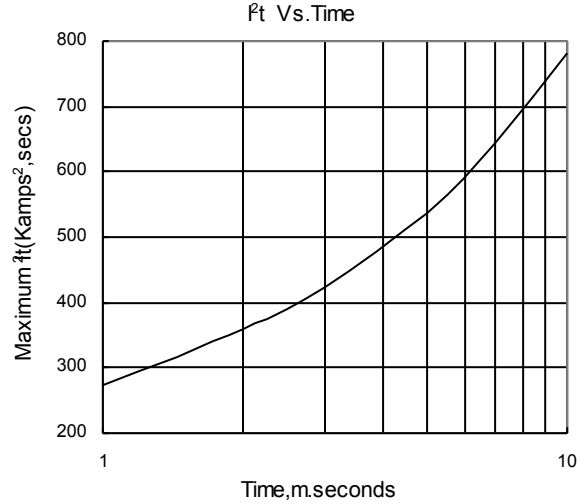


Fig.8

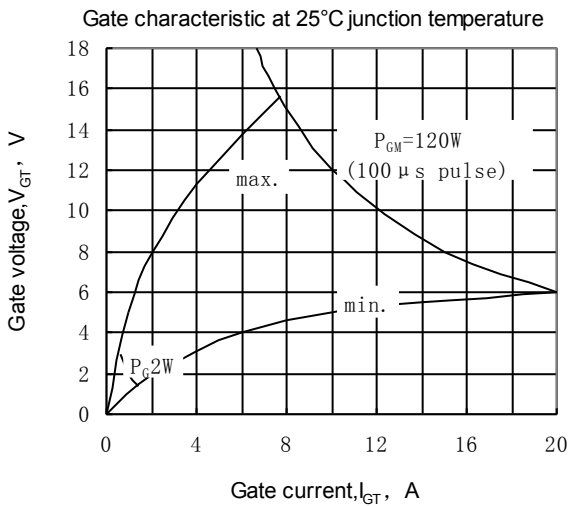


Fig.9

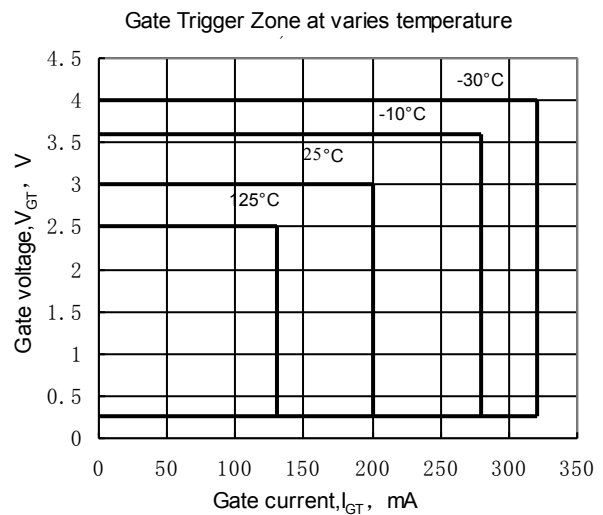


Fig.10

**Outline:**

