

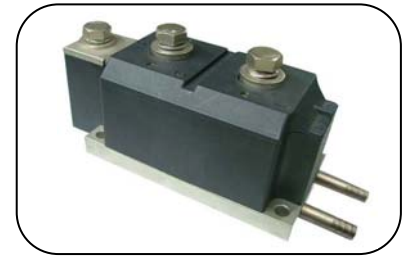
### Features:

- Isolated mounting base 2500V~
- 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

$I_{T(AV)}$             **1000A**  
 $V_{DRM}/V_{RRM}$     **600~1800V**  
 $I_{TSM}$               **28 KA**  
 $I^2t$                  **3920 10<sup>3</sup>A<sup>2</sup>S**



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> =55°C	125			1000	A
$I_{T(RMS)}$	RMS on-state current		125			1570	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM}&V_{RRM}$ tp=10ms $V_{DSM}&V_{RSM}=V_{DRM}&V_{RRM}+100V$	125	600		1800	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	$V_{DM}=V_{DRM}$ $V_{RM}=V_{RRM}$	125			55	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave, $V_R=0.6V_{RRM}$	125			28.0	KA
$I^2t$	I <sup>2</sup> T for fusing coordination					3920	A <sup>2</sup> s*10 <sup>3</sup>
$V_{TO}$	Threshold voltage		125			0.81	V
$r_T$	On-state slop resistance					0.21	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM}=3000A$	25			1.95	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	$I_{TM}=2000A$ , Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive	125			100	A/μs
$I_{GT}$	Gate trigger current			30		200	mA
$V_{GT}$	Gate trigger voltage	$V_A=12V, I_A=1A$	25	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	Single side cooled				0.052	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Single side cooled				0.018	°C /W
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> : 1mA(MAX)		2500			V
$F_m$	Thermal connection torque(M12)				12		N·m
	Mounting torque(M8)				12		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				3600		g
Outline	411F3						

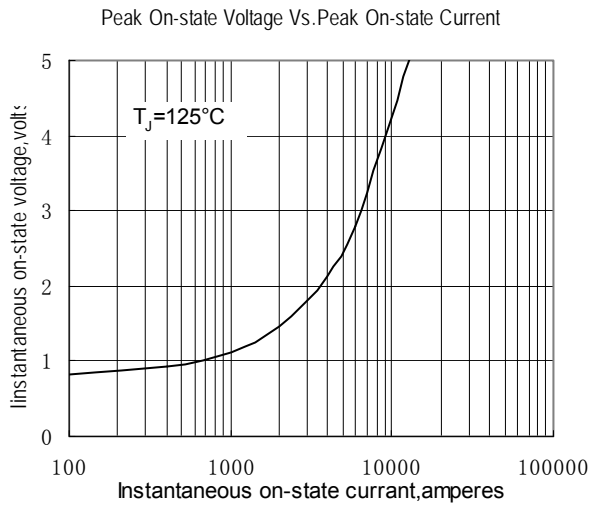


Fig.1

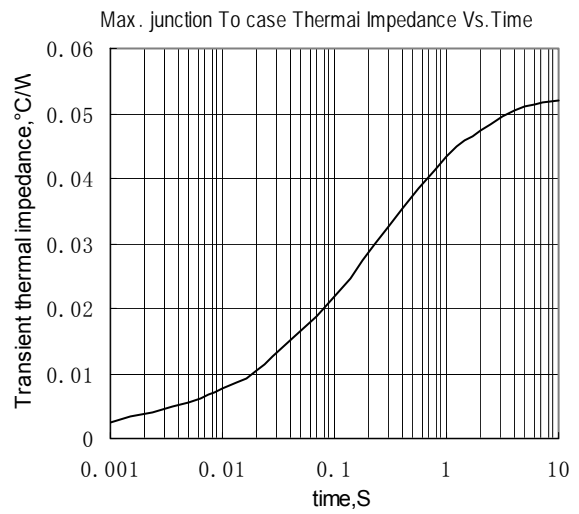


Fig.2

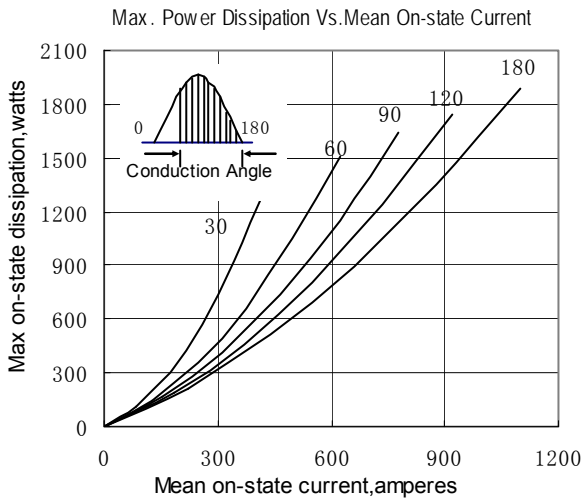


Fig.3

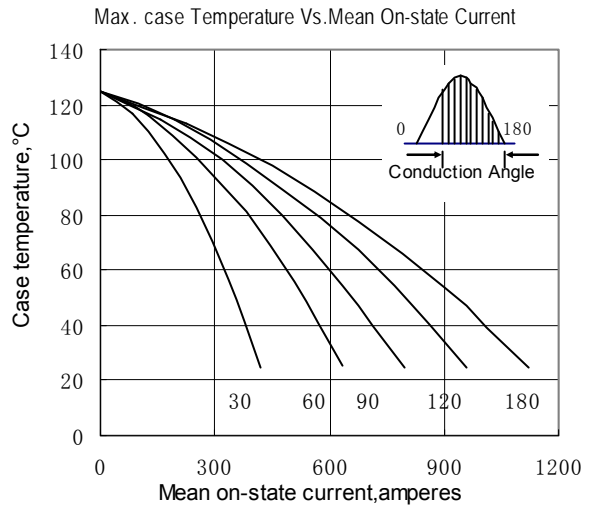


Fig.4

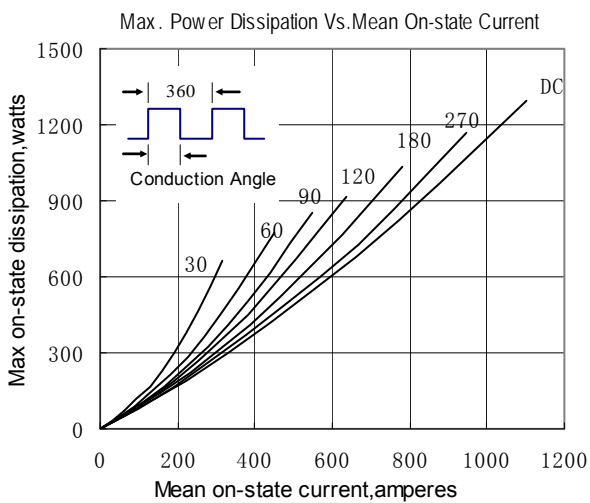


Fig.5

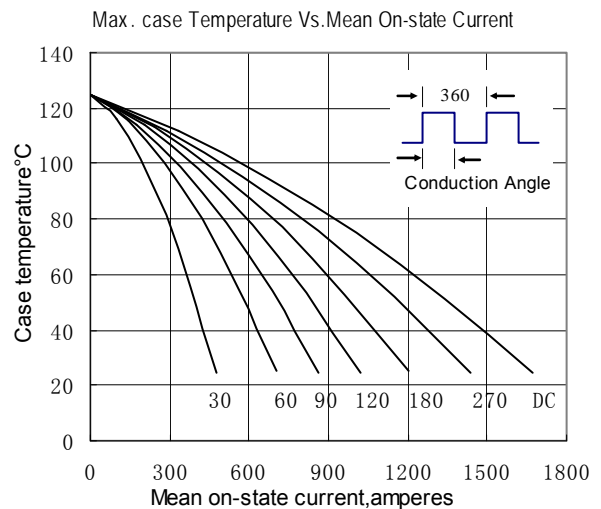


Fig.6

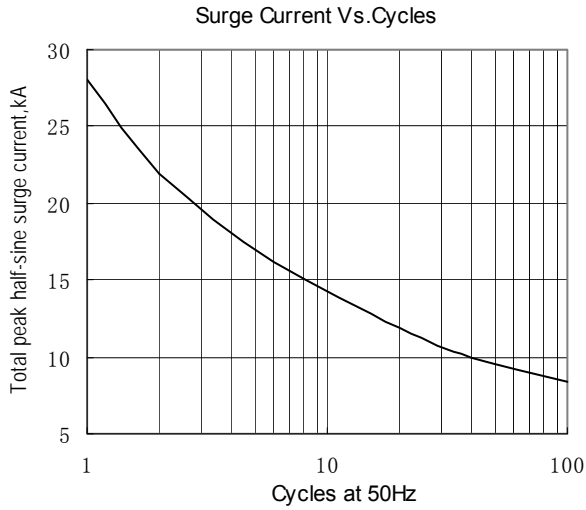


Fig.7

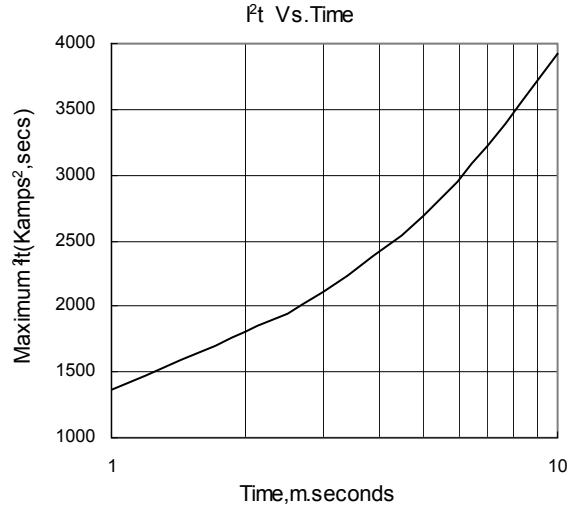


Fig.8

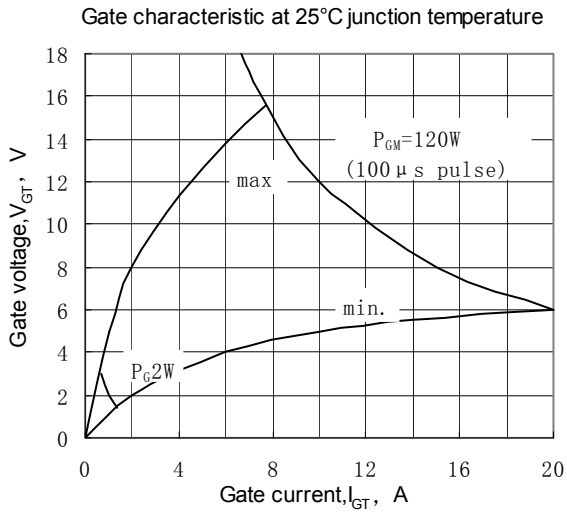


Fig.9

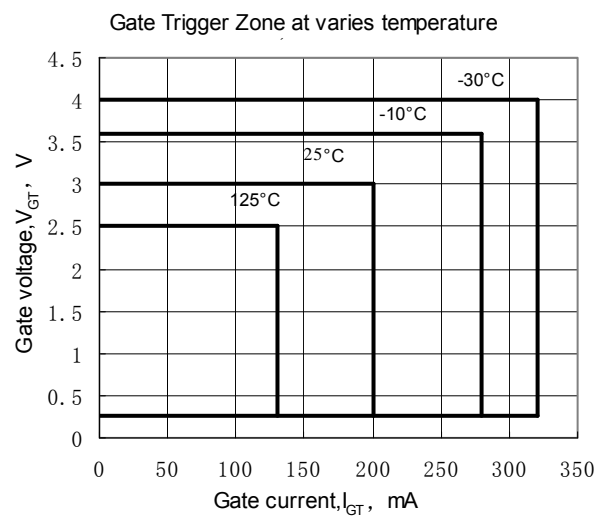


Fig.10

**Outline:**

