

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

$I_{T(AV)}$	40A
V_{DRM}/V_{RRM}	600~1800V
I_{TSM}	$1.15A \times 10^3$
I^2t	$6.6A^2 \cdot S \cdot 10^3$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^{\circ}C$	125			40	A
$I_{T(RMS)}$	RMS on-state current		125			63	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ $t_p=10ms$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$ respectively	125	600		1800	V
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			1.15	KA
I^2t	I^2T for fusing coordination					6.60	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			5.57	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=120A$	25			1.60	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	Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$		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				0.650	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	$^{\circ}C/W$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1min, I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				4.0		N·m
	Mounting torque(M6)				6.0		N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				115		g
Outline	215F3/223f3						

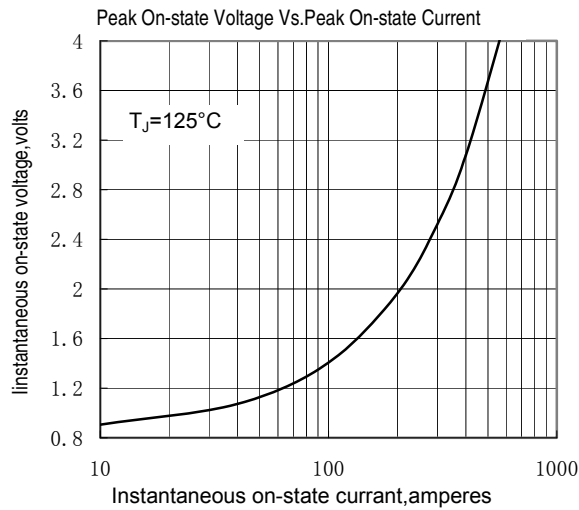


Fig.1

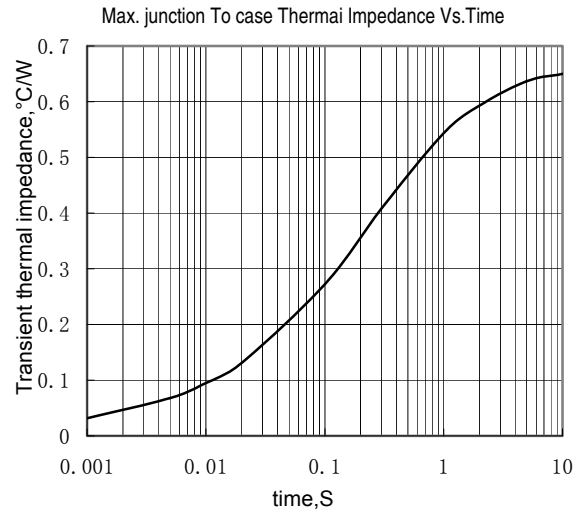


Fig.2

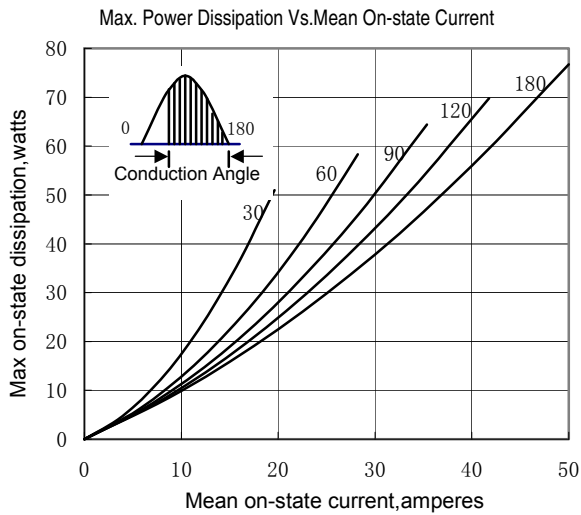


Fig.3

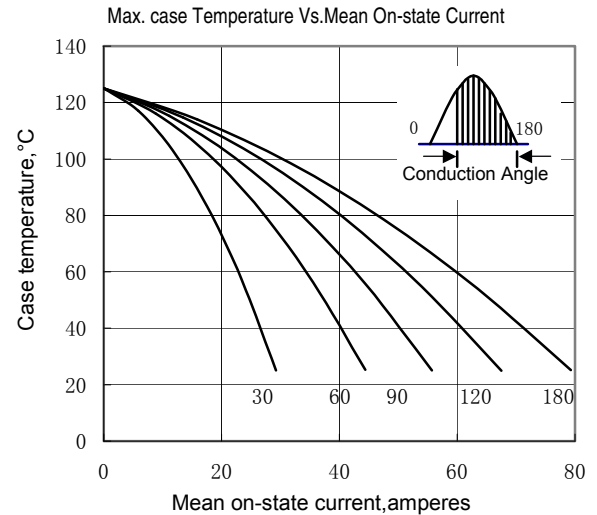


Fig.4

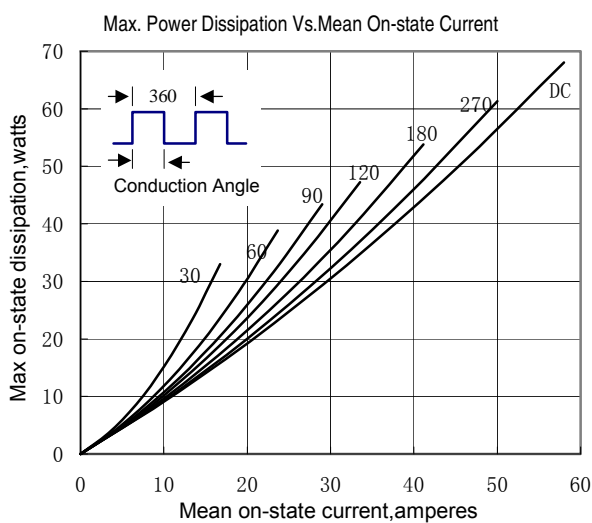


Fig.5

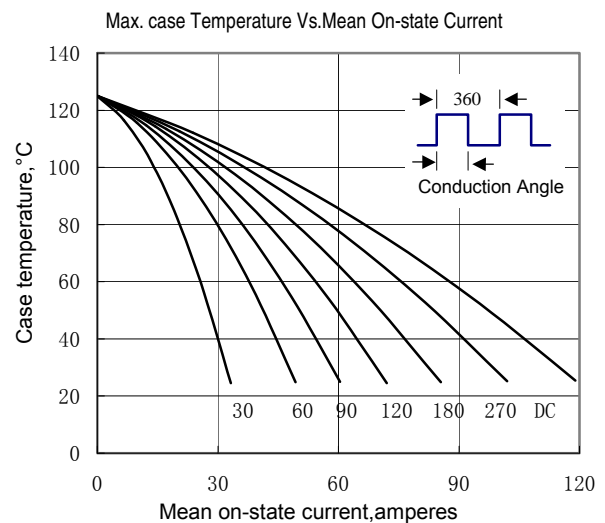


Fig.6

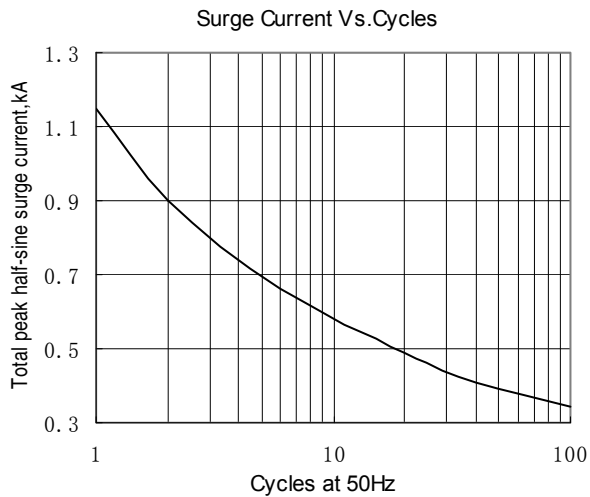


Fig.7

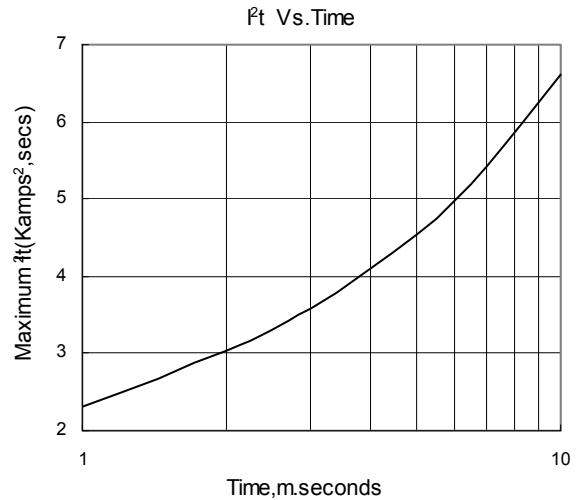


Fig.8

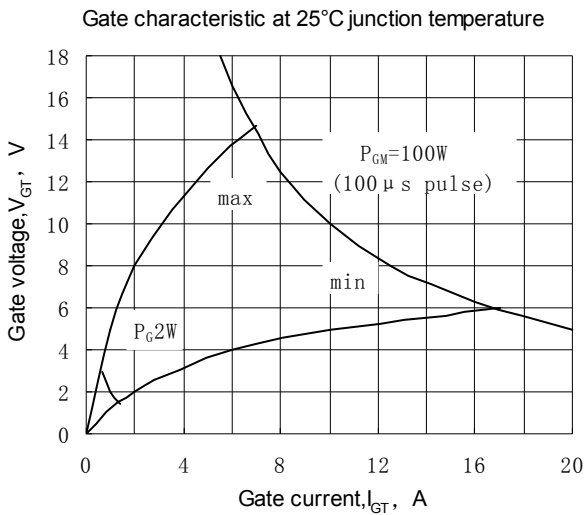


Fig.9

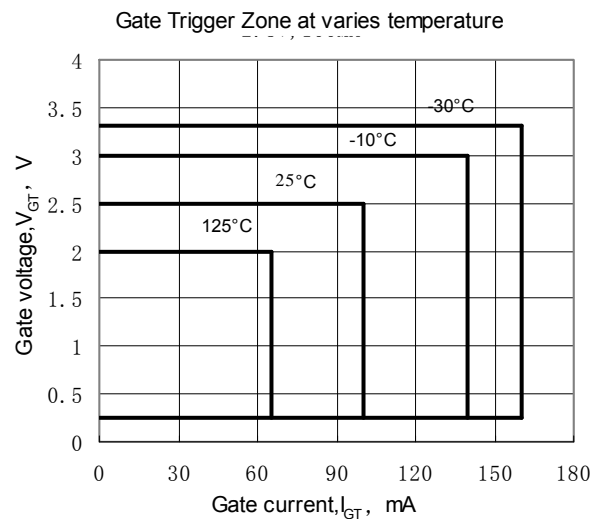


Fig.10

Outline:

