

### Features:

- Isolated mounting base 2500V~
- Pressure contact technology with  
Increased power cycling capability
- Space and weight savings

### Typical Applications

- Inverter
- Inductive heating
- Chopper

$I_{T(AV)}$	<b>200 A</b>
$V_{DRM} / V_{RRM}$	<b>600~1600 V</b>
$I_{TSM}$	<b><math>4.8 A \times 10^3</math></b>
$I^2t$	<b><math>115 A^2 S \times 10^3</math></b>



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	115			200	A
$I_{T(RMS)}$	RMS on-state current		115			314	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	115	600		1600	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	115			50	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave $V_R = 60\% V_{RRM}$	115			4.8	KA
$I^2t$	$I^2T$ for fusing coordination					115	$A^2s \times 10^3$
$V_{TO}$	Threshold voltage		115			0.90	V
$r_T$	On-state slop resistance					1.15	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM} = 600A$	25			1.77	V
$dv/dt$	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	115			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	115			200	A/μs
$tq$	Circuit commutated turn-off time	$I_{TM} = 200A, tp = 1000\mu s, V_R = 50V$ $dv/dt = 30V/\mu s, di/dt = -20A/\mu s$	115	15		35	μs
$t_{rr}$	Reverse recovery time	$I_{FM} = 200A, tp = 1000\mu s,$ $-di/dt = 20A/\mu s, V_R = 50V$	115		3.0		μs
$I_{GT}$	Gate trigger current		25	30		180	mA
$V_{GT}$	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		2.5	V
$I_H$	Holding current			20		100	mA
$V_{GD}$	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	115	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.100	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°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(M8)				12		N·m
	Mounting torque(M6)				6		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				860		g
<b>Outline</b>	413F3						

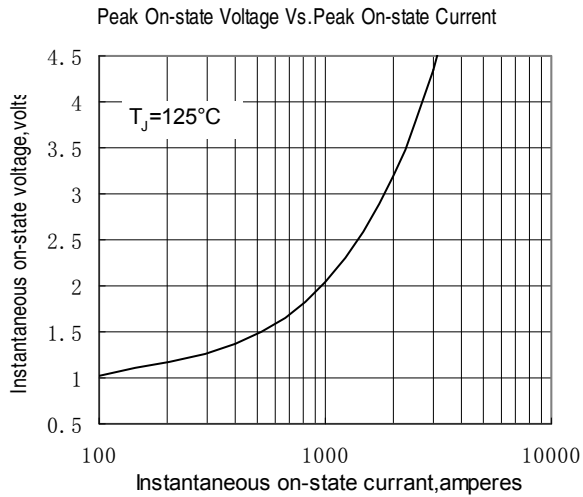


Fig.1

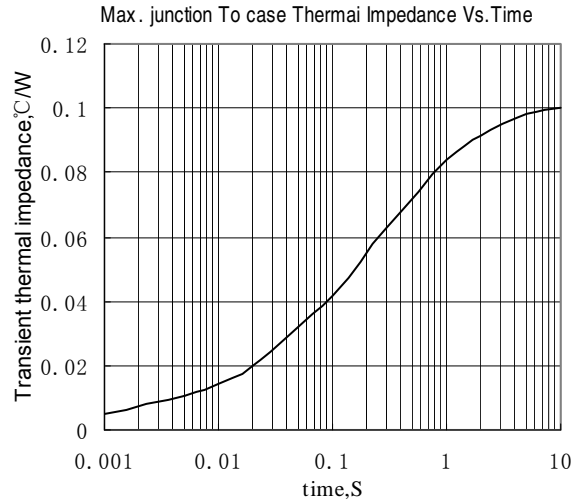


Fig.2

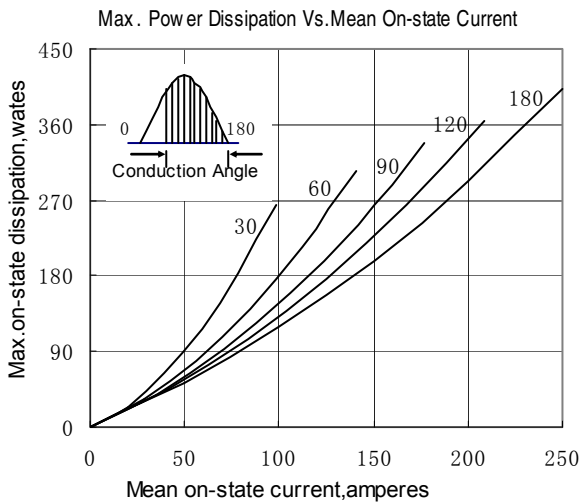


Fig.3

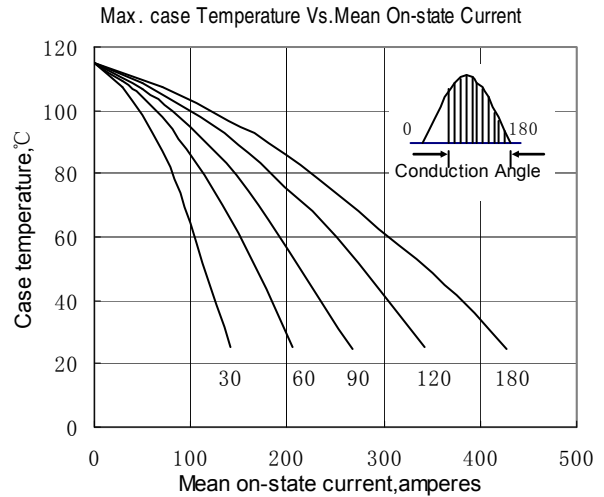


Fig.4

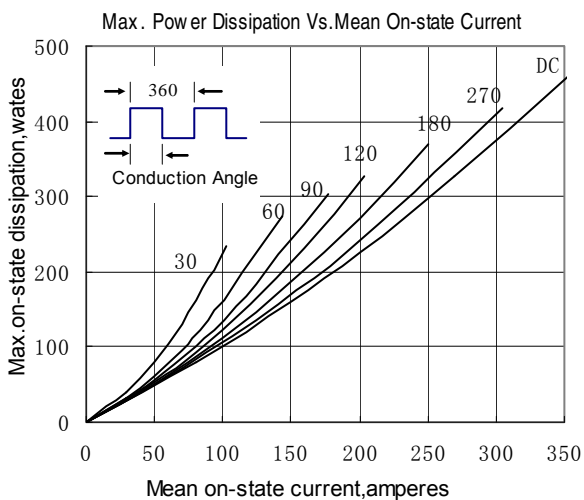


Fig.5

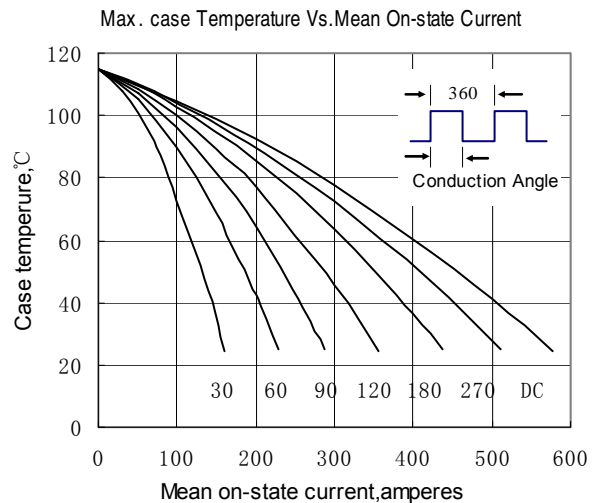


Fig.6

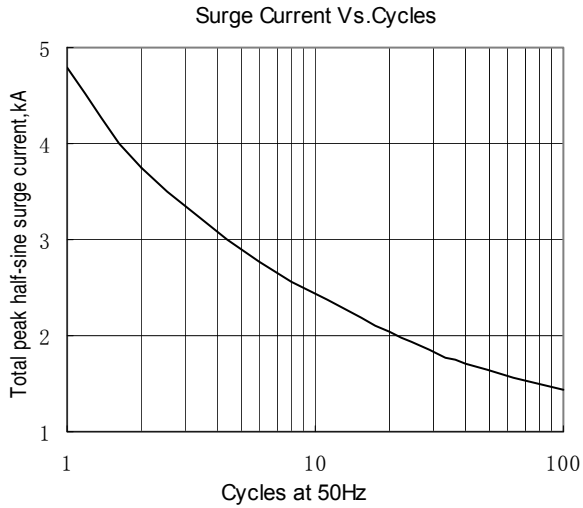


Fig.7

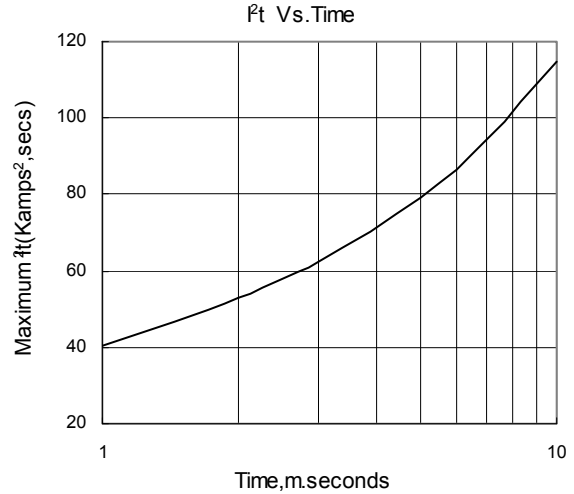


Fig.8

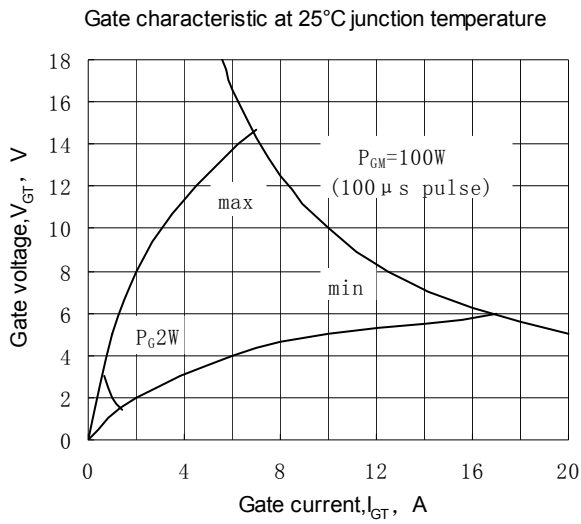


Fig.9

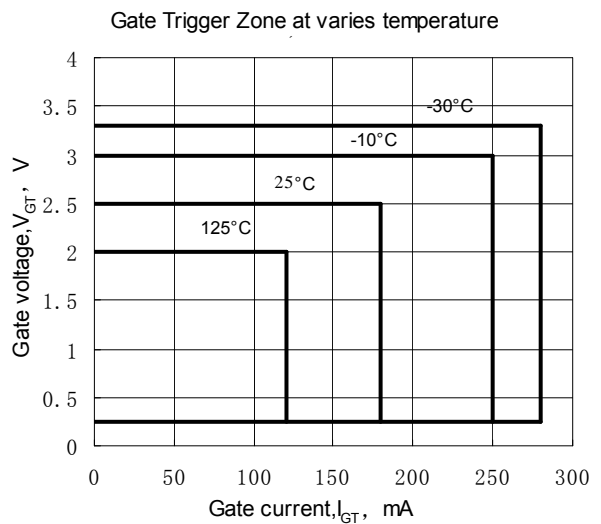


Fig.10

**Outline:**

