

Features:

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

Typical Applications

- Inverter
- Inductive heating
- Chopper

$I_{T(AV)}$ 150 A
 V_{DRM} / V_{RRM} 600~1600 V
 I_{TSM} 3.4 A $\times 10^3$
 I^2t 58 A 2 S $\times 10^3$



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, $T_c=85^\circ\text{C}$	115			150	A
$I_{T(RMS)}$	RMS on-state current		115			236	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100\text{V}$ respectively	115	600		1600	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	115			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	115			3.4	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$				58	A 2 s $\times 10^3$
V_{TO}	Threshold voltage		115			0.85	V
r_T	On-state slop resistance					1.66	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=450\text{A}$	25			1.78	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 $t_r \leq 0.5\mu\text{s}$ Repetitive	115			200	A/ μs
tq	Circuit commutated turn-off time	$I_{TM}=150\text{A}, tp=1000\mu\text{s}, V_R=50\text{V}$ $dv/dt=30\text{V}/\mu\text{s}, di/dt=-20\text{A}/\mu\text{s}$	115	15		35	μs
t_{rr}	Reverse recovery time	$I_{FM}=150\text{A}, tp=1000\mu\text{s},$ $-di/dt=20\text{A}/\mu\text{s}, V_R=50\text{V}$	115		2.0		μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A=12\text{V}, I_A=1\text{A}$		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				0.140	°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, $I_{iso}=1\text{mA}(\text{MAX})$	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
Outline				413F3			

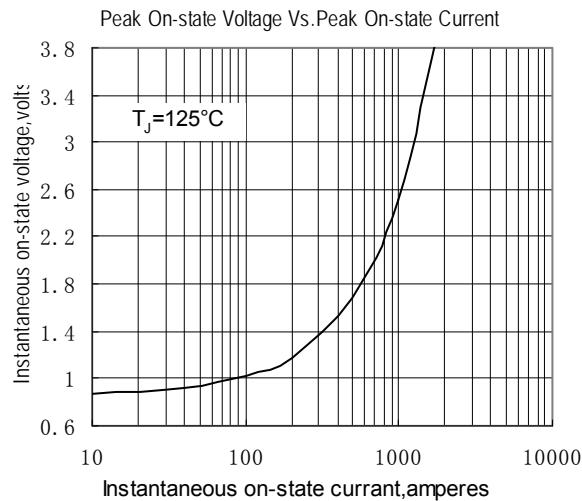


Fig.1

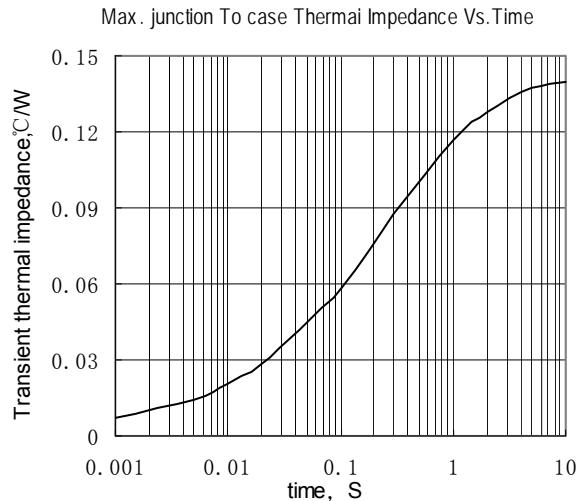


Fig.2

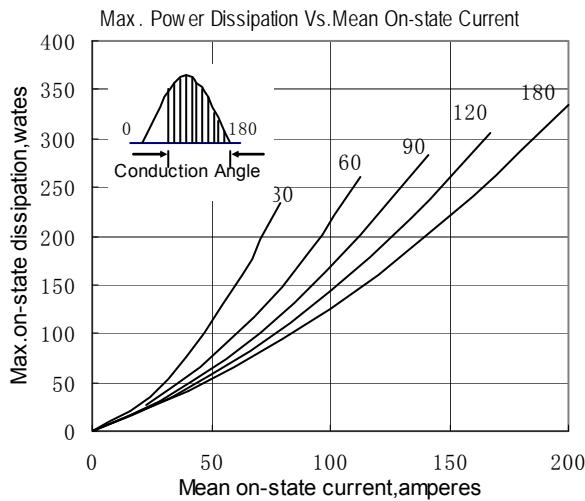


Fig.3

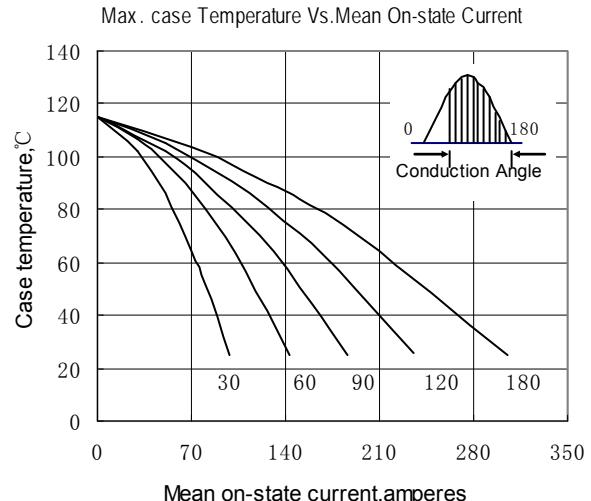


Fig.4

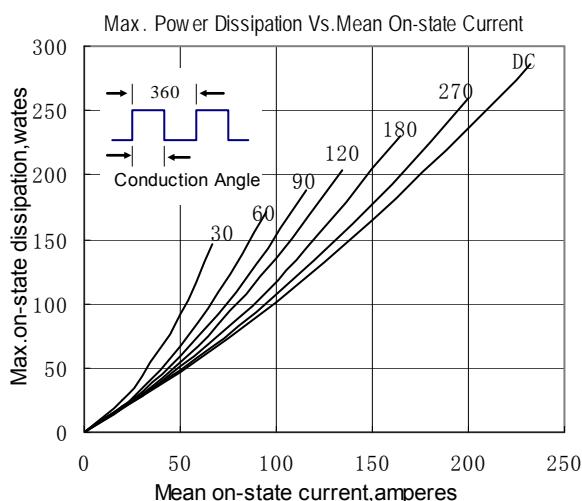


Fig.5

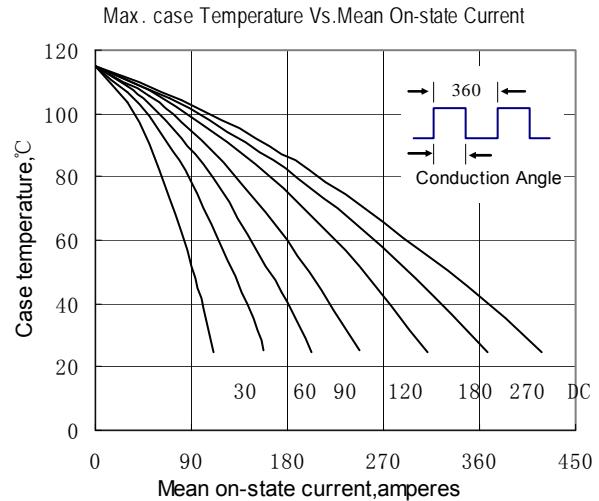


Fig.6

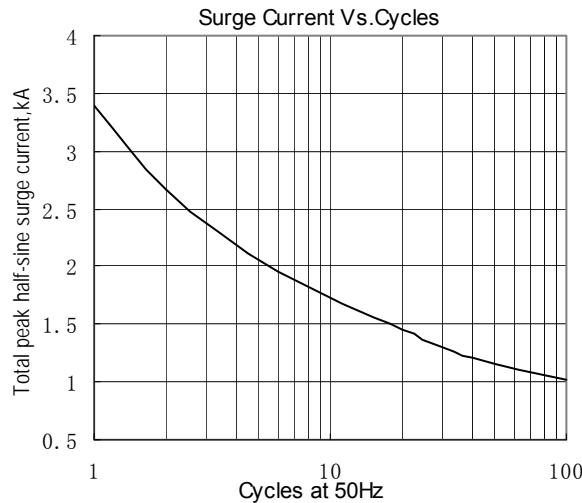


Fig.7

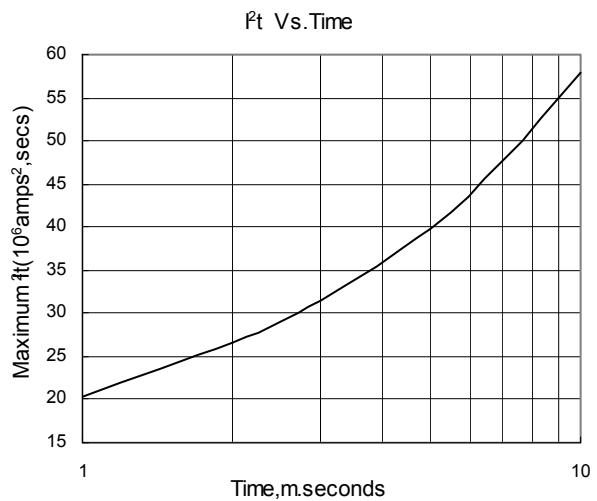


Fig.8

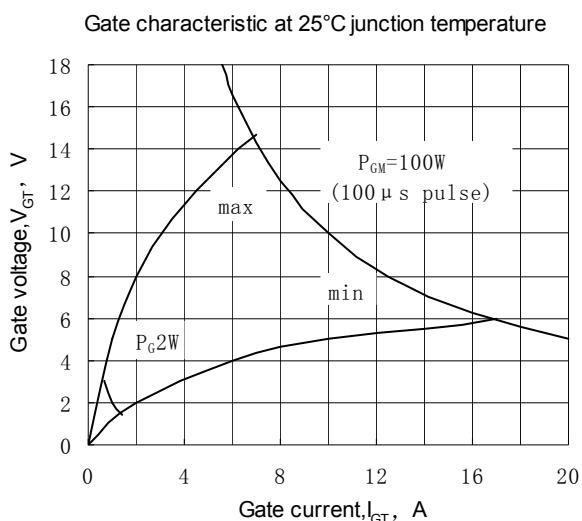


Fig.9

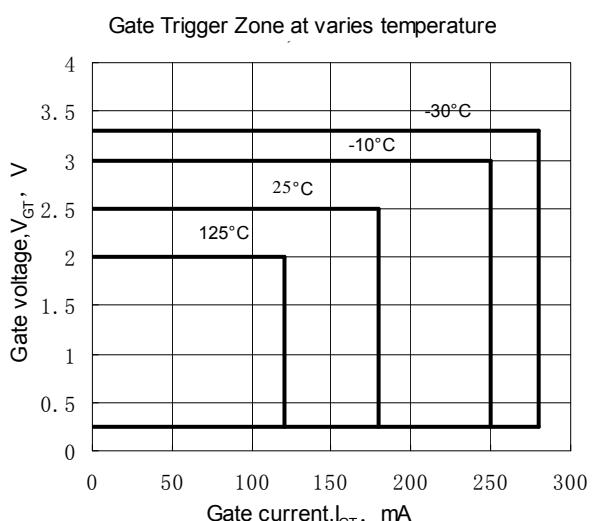


Fig.10

Outline:

