

Features:

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

Typical Applications

- Inverter
- Inductive heating
- Chopper

$I_{T(AV)}$	400 A
V_{DRM} / V_{RRM}	600~1600 V
I_{TSM}	$7.80 A \times 10^3$
I^2t	$310 A^2 S \cdot 10^3$



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 =55°C	115			400	A
$I_{T(RMS)}$	RMS on-state current		115			628	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	115	600		1600	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	115			80	mA
I_{TSM}	Surge on-state current	10ms half sine wave	115			7.80	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				310	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		115			0.90	V
r_T	On-state slop resistance					0.8	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1200A$	25			2.10	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
t_q	Circuit commutated turn-off time	$I_{TM} = 400A, t_p = 1000\mu s, V_R = 50V$ $dv/dt = 30V/\mu s, di/dt = 20A/\mu s$	115	15		35	μs
t_{rr}	Reverse recovery time	$I_{FM} = 400A, t_p = 1000\mu s,$ $-di/dt = 20A/\mu s, V_R = 50V$	115		4.0		μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	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				0.087	°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} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M10)				12		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				1820		g
Outline	406F3						

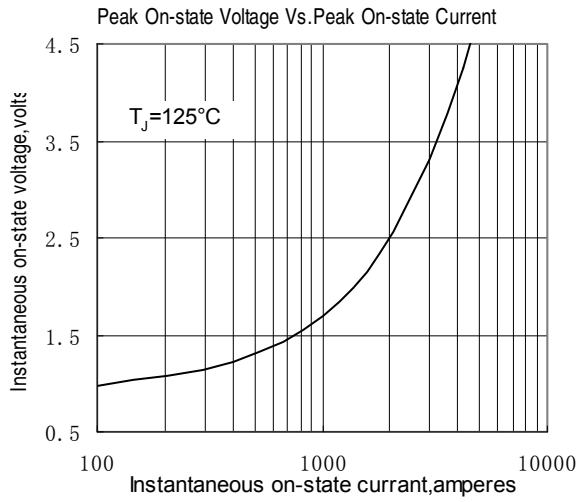


Fig.1

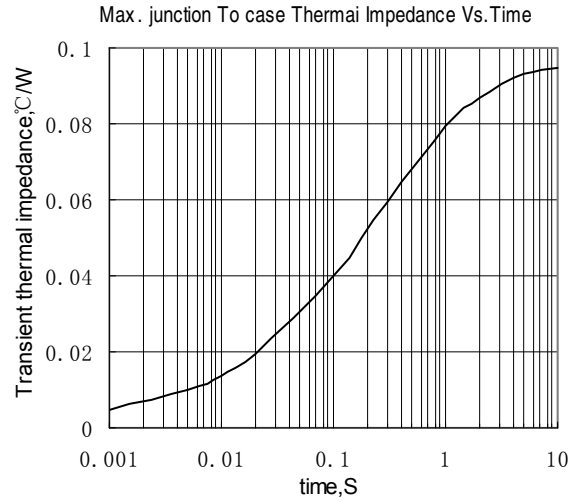


Fig.2

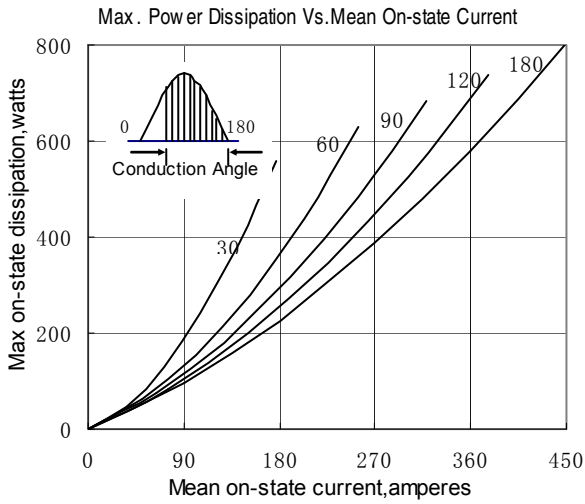


Fig.3

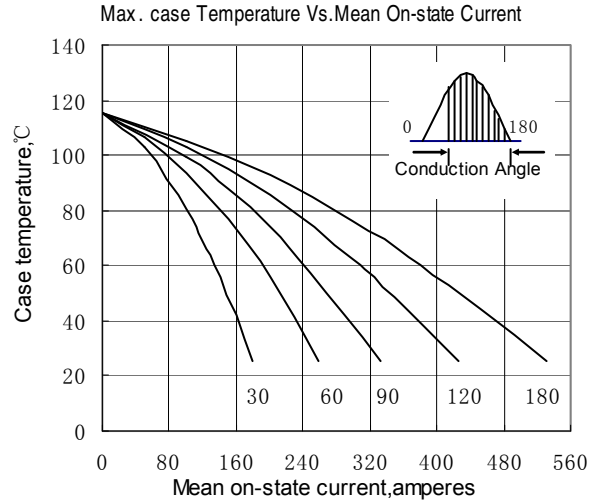


Fig.4

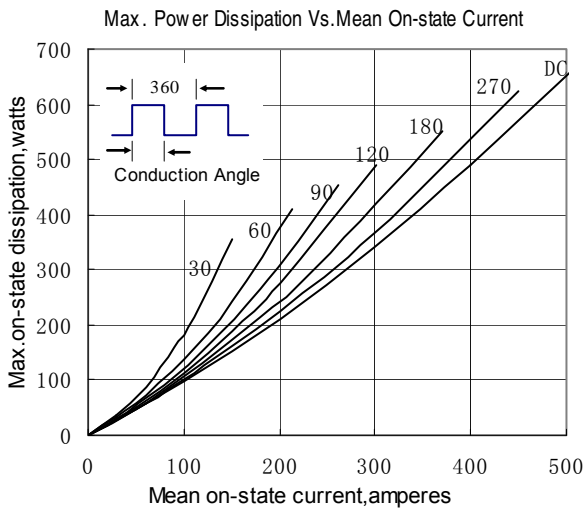


Fig.5

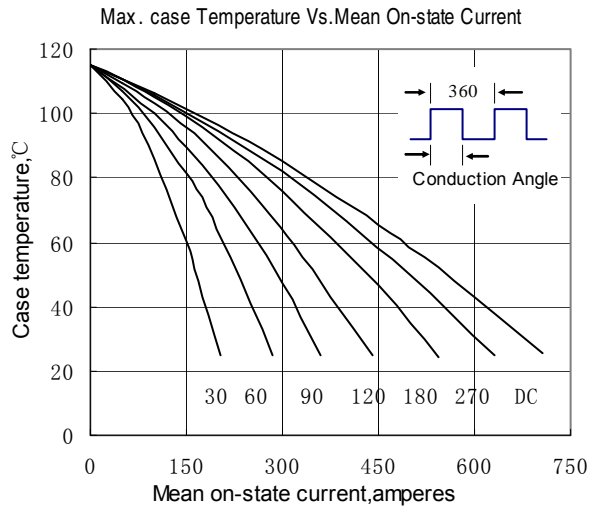


Fig.6

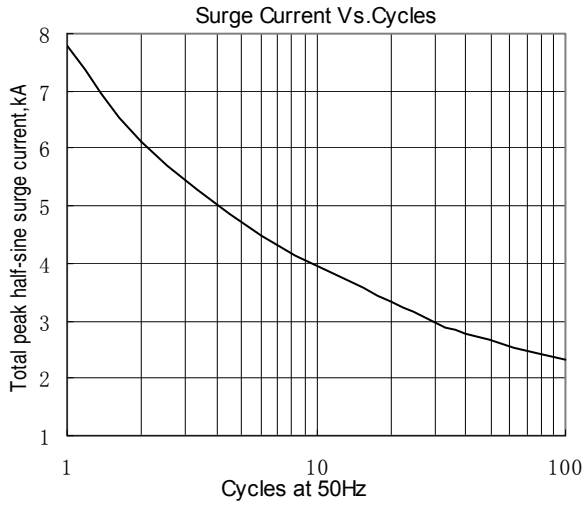


Fig.7

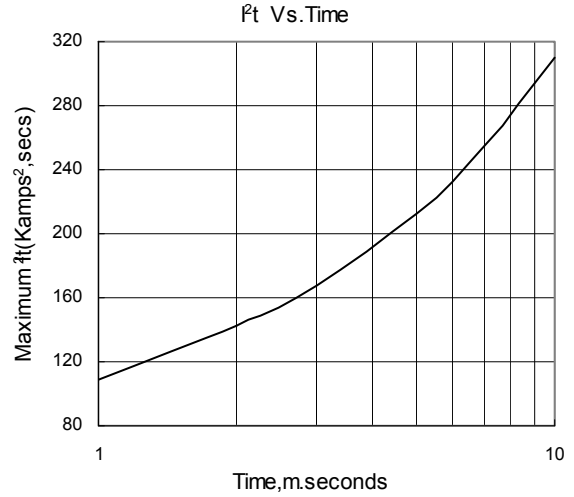


Fig.8

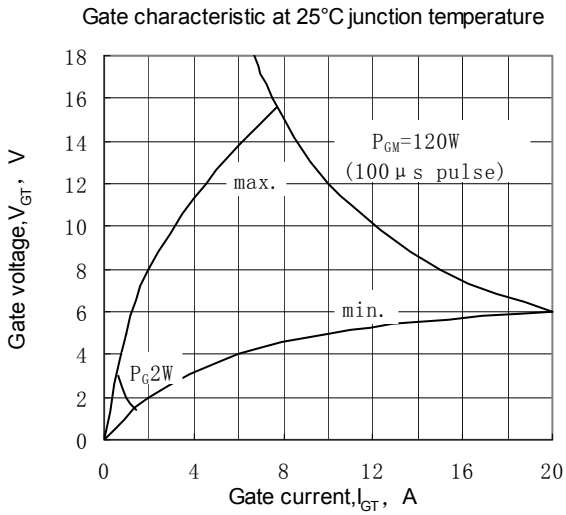


Fig.9

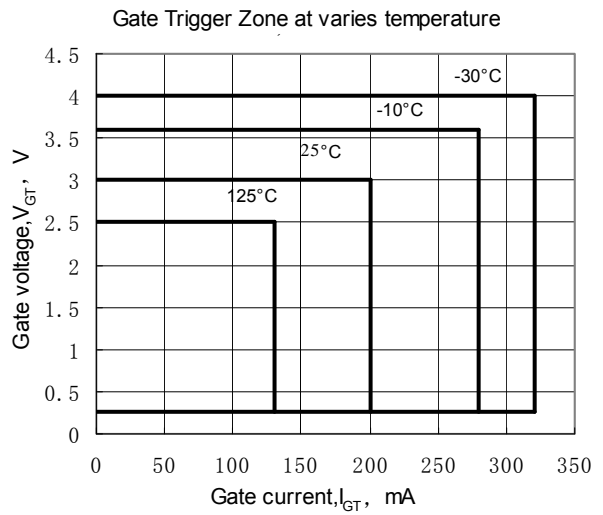


Fig.10

Outline:

