

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

$I_{T(AV)}$	2000A
V_{DRM}/V_{RRM}	1100~1800V
I_{TSM}	30 KA
I^2t	4500 10³A²S



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, $T_c=55^{\circ}C$	125			2000	A
$I_{T(RMS)}$	RMS on-state current		125			3140	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM} \ t_p=10ms$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$	125	1100		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM} = V_{DRM}$ $V_{RM} = V_{RRM}$	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave,	125			30.0	KA
I^2t	I^2T for fusing coordination	$V_R = 0.6V_{RRM}$				4500	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.53	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=3000A$	25			2.10	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			1000	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			200	A/μs
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$	25	30		200	mA
V_{GT}	Gate trigger voltage			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				0.016	°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, $t=1min, I_{iso}:1mA(MAX)$		2500			V
F_m	Thermal connection torque(M16)				20		N·m
	Mounting torque(M12)				14		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				9000		g
Outline	W100						

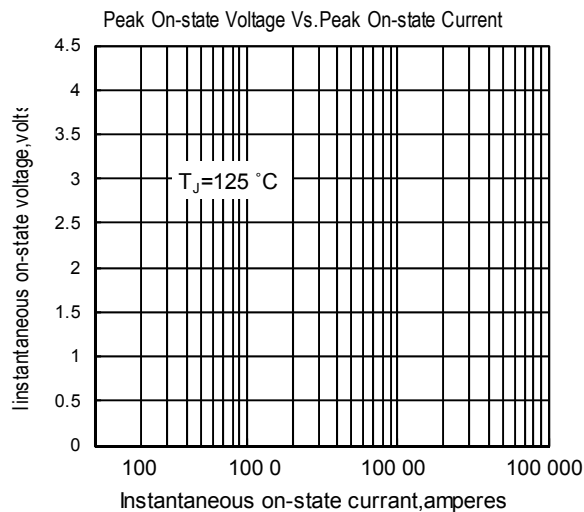


Fig.1

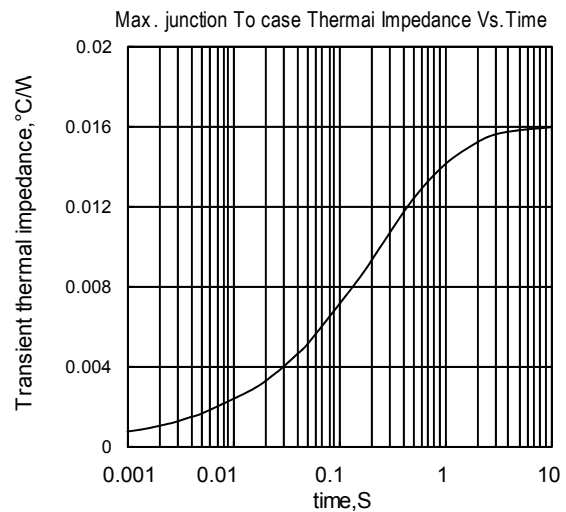


Fig.2

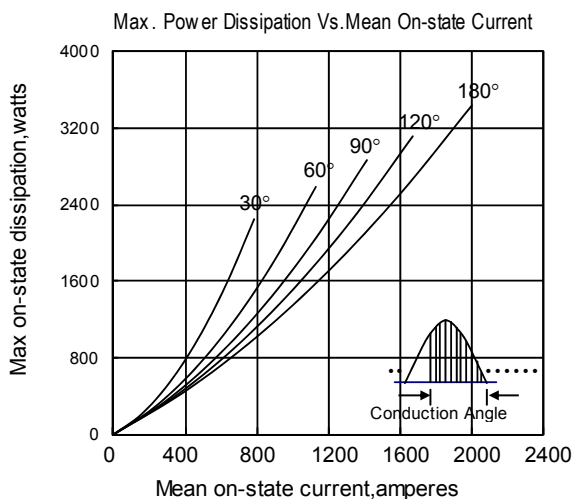


Fig.3

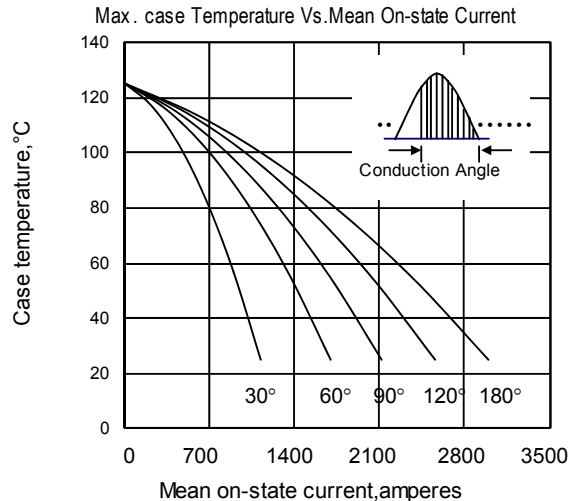


Fig.4

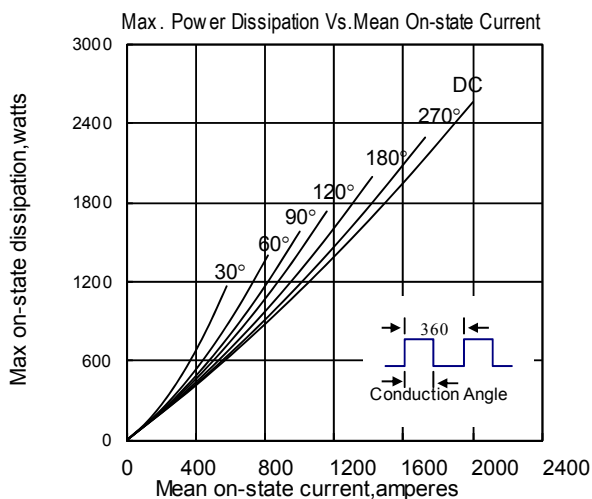


Fig.5

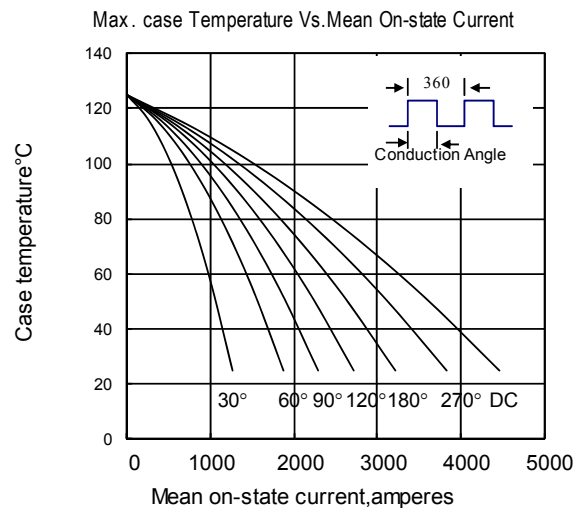


Fig.6

Surge Current Vs.Cycles

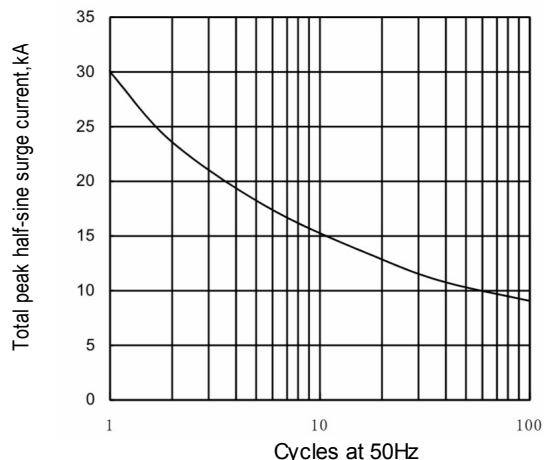


Fig.7

Gate characteristic at 25°C junction temperature

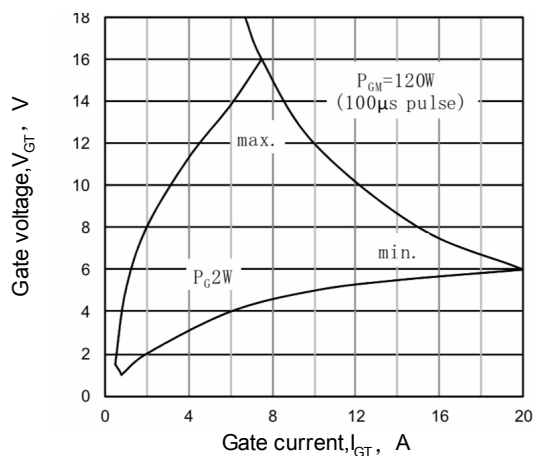


Fig.9

I^2t Vs. Time

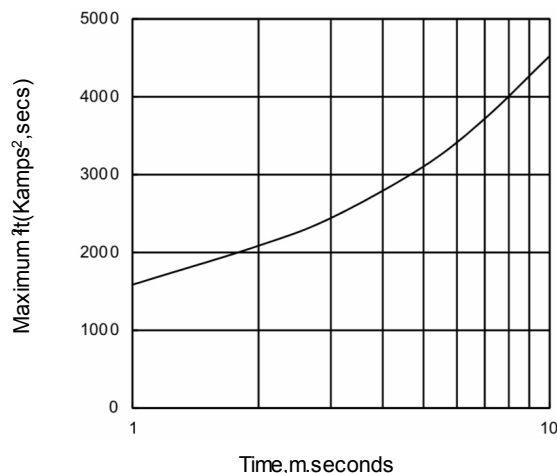


Fig.8

Gate Trigger Zone at varies temperature

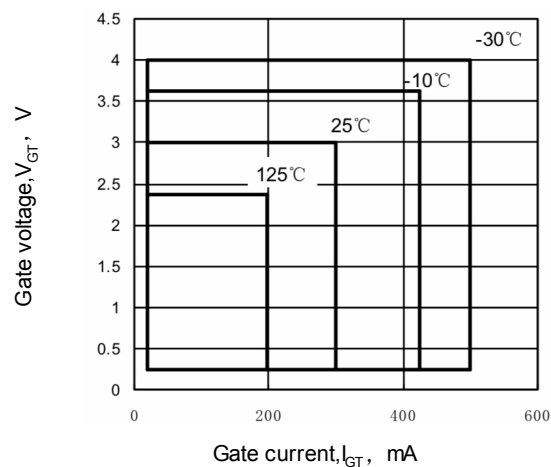
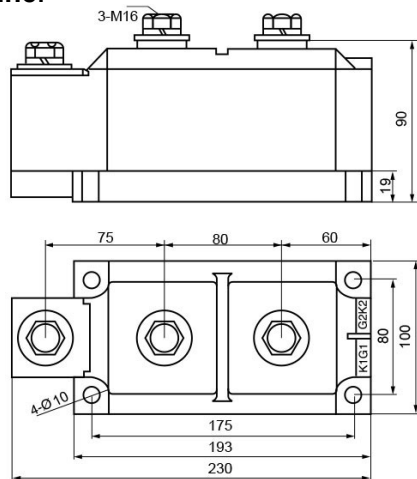


Fig.10

Outline:



W100

