产品规格书

Specification of Products

产品名称：可控硅模块

产品型号：MFC182A

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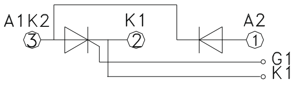
SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j（℃)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$ $I_{F(AV)}$	Mean on-state current	180° half sinewave 50Hz Single side cooled, T_c=85°C	125			182	A
$I_{T(RMS)}$	RMS on-state current	Single side cooled, T_c=85°C	125			286	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM}&V_{RRM} tp=10ms V_{DsM}&V_{RsM}= V_{DRM}&V_{RRM}+200V respectively	125	600		1600	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			25	mA
I_{TSM}	Surge on-state current	10ms half sinewave V_R=60%V_{RRM}	125			5.80	KA
I^2t	I^2T for fusing coordination					172	A^2s*10^3
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					1.26	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=550A	125			1.4	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	From 67%V_{DRM} to 550A,Gate source 1.5A t_r≤0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		150	mA
V_{GT}	Gate trigger voltage			0.8		2.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	At 67%V_{DRM}	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to heatsink	At 180° sine, Single side cooled				0.160	℃/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso}: 1mA(MAX)		2500			V
F_m	Thermal connection torque(M6)				0.3		N.m
	Mounting torque(M6)				0.3		N.m
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight				390		g
Outline							

OUTLINE DRAWING & CIRCUIT DIAGRAM

MFC



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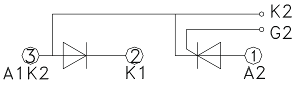

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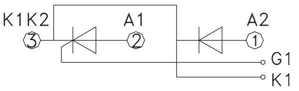

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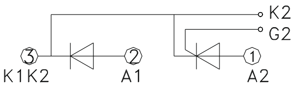

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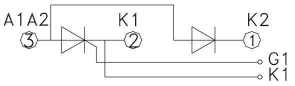

Rating and Characteristic

Peak On-state Voltage Vs.Peak On-state Current

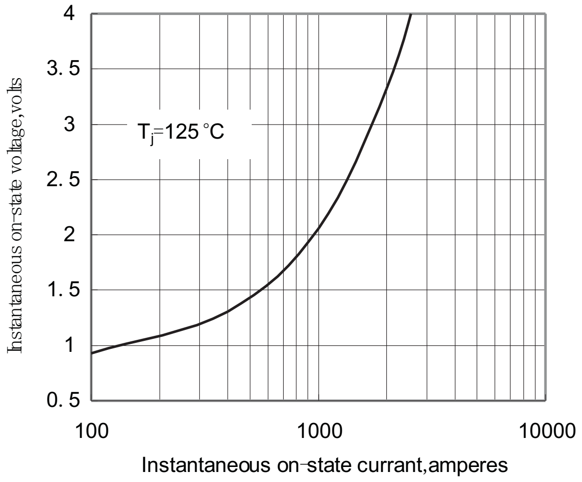

Fig. 1

Max. junction To case Thermai Impedance Vs.Time

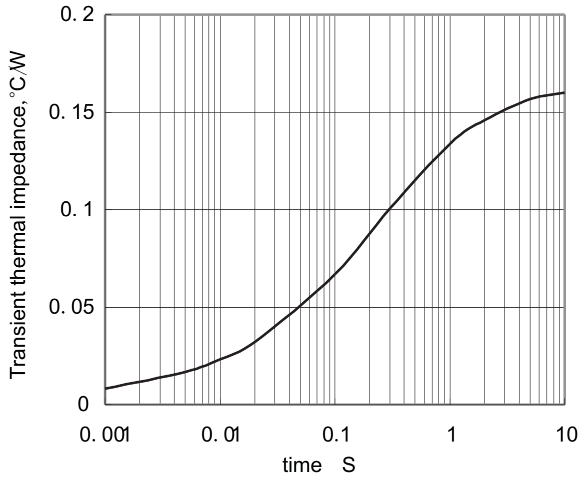

Fig. 2

Max. Power Dissipation Vs.Mean Onstate Current

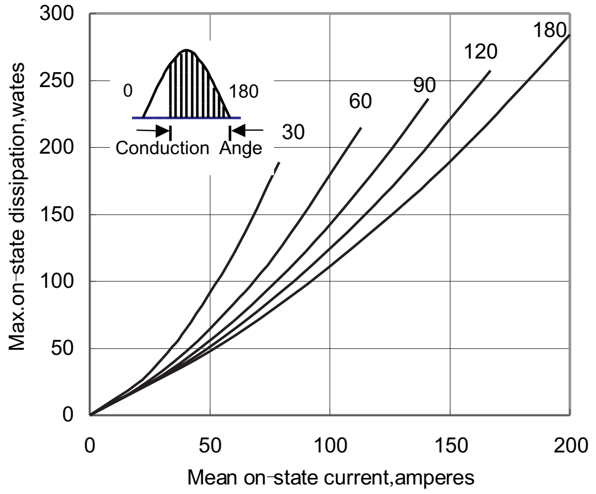

Fig. 3

Max. case Temperature Vs.Mean Onstate Current

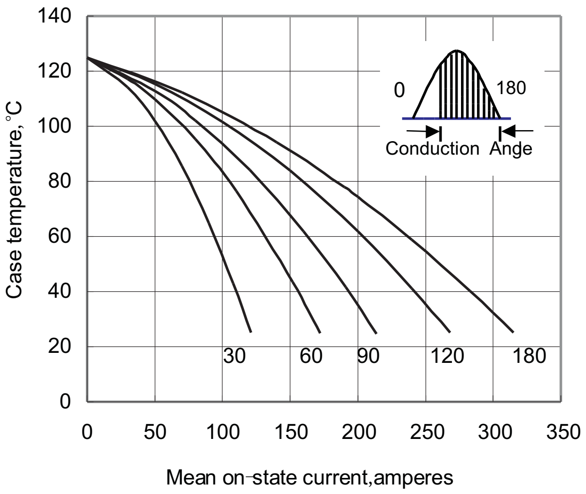

Fig. 4

Max. Power Dissipation Vs.Mean Onstate Current

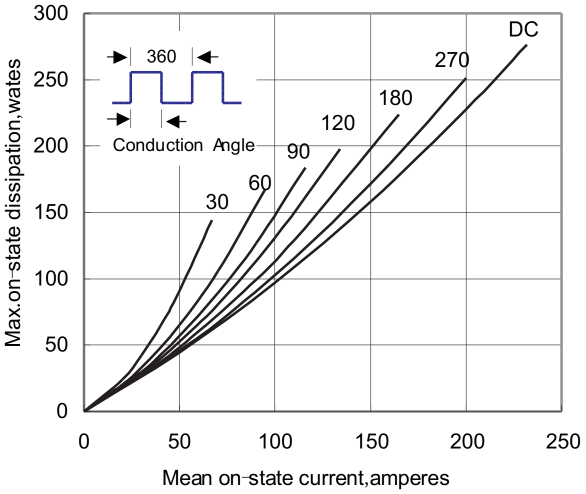

Fig. 5

Max. case Temperature Vs.Mean Onstate Current

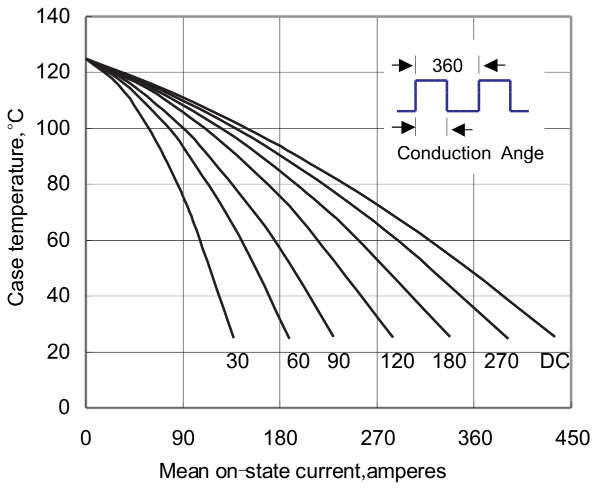

Fig. 6

Rating and Characteristic

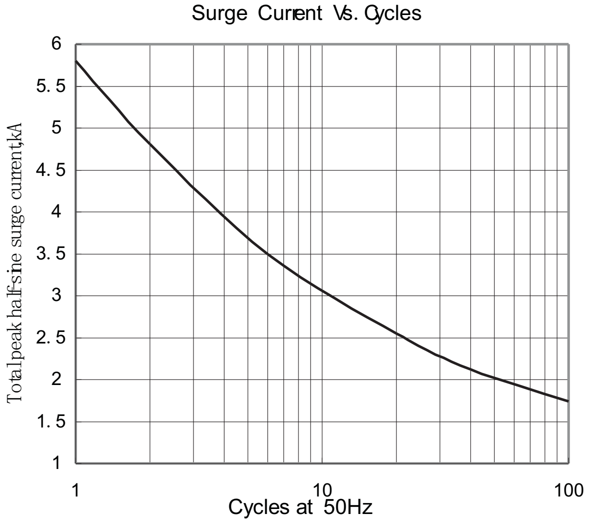

Fig. 7

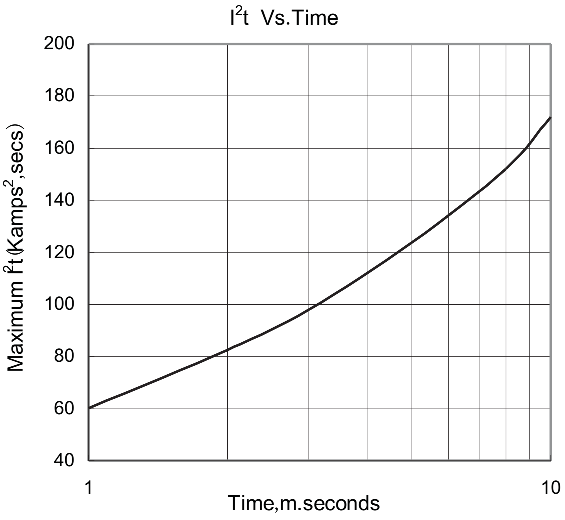

Fig. 8

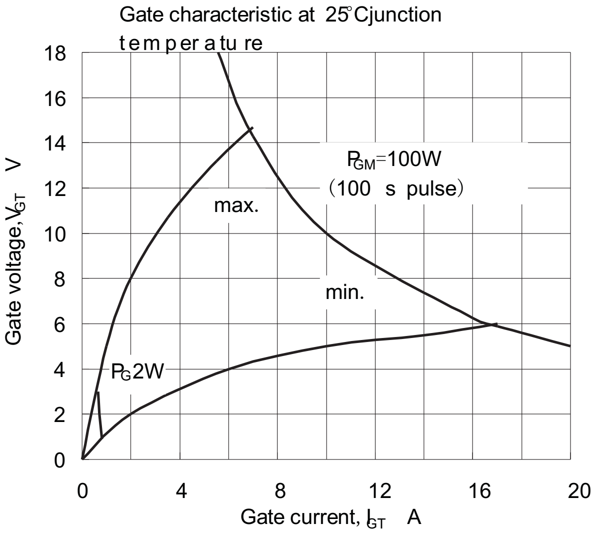

Fig. 9

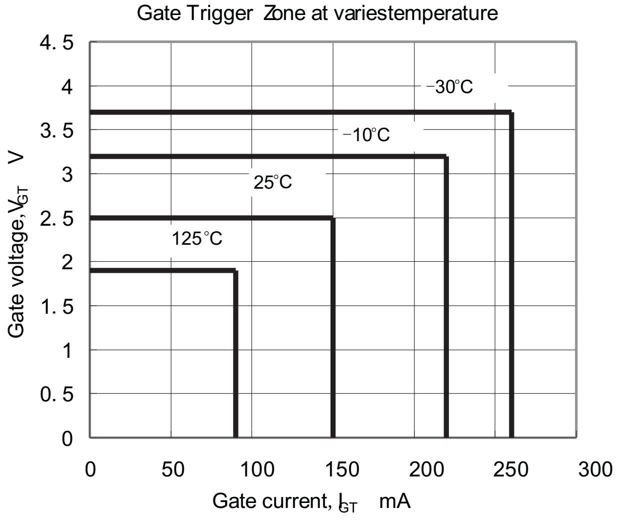

Fig. 10

Outside Dimension