



浙江芯芯电子有限公司
ZHEJIANG XINXIN ELECTRICAL CO., LTD.

产品规格书

Specification of Products

产品名称: 单相可控桥式模块

产品型号: MFQA40A

浙江芯芯电子有限公司

ZHEJIANG XINXIN ELECTRICAL CO., LTD.

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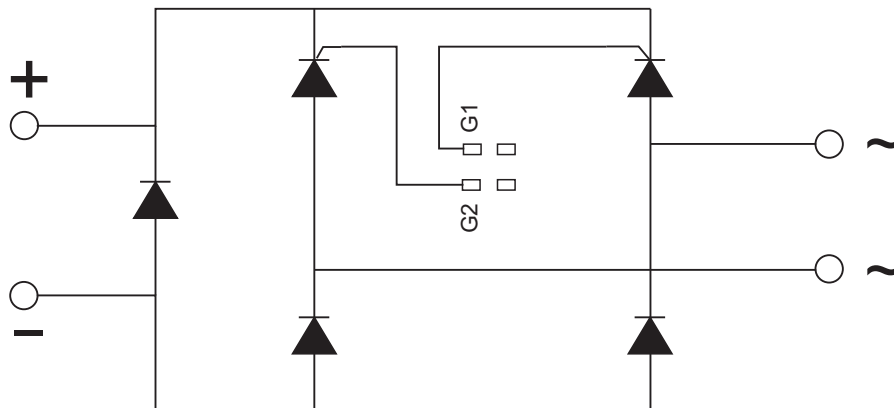
<http://www.zjxxdz1.com>

拟制	审核	核准
丁国盛	李园利	麻伟阳

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SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sinewave 50Hz Single side cooled, T _j =85°C	125			40	A
I _{T(RMS)}	RMS on-state current	Single side cooled, T _j =85°C	125			63	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		1800	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			8	mA
I _{TSM}	Surge on-state current	10ms half sinewave	125			1.00	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}				5.10	A ² s*10 ³
V _{TO}	Threshold voltage		125			0.85	V
r _T	On-state slop resistance					5.57	mΩ
V _{FM}	Peak forward voltage	I _{FM} =40A	25			1.1	V
V _{TM}	Peak on-state voltage	I _{TM} = 40A	25			1.4	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			500	V/μs
di/dt	Critical rate of rise of on-state current	From 67%V _{DRM} to 120A, Gate source 1.5A t _r ≤ 0.5 μs Repetitive	125			100	A/μs
I _{GT}	Gate trigger current	V _A =12V, I _A =1A	25	30		80	mA
V _{GT}	Gate trigger voltage			0.7		1.5	V
I _H	Holding current			20		100	mA
R _{th(j-c)}	Junction to heatsink	Single side cooled				0.75	°C /W
V _{iso}	Isolation voltage	50Hz, R.M. S, t=1min I _{iso} : 1mA (max)		2500			V
F _m	Terminal connection torque						N.m
	Mounting torque(M4)				1.5		N.m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				160		g
Outline							

OUTLINE DRAWING & CIRCUIT DIAGRAM



Rating and Characteristic

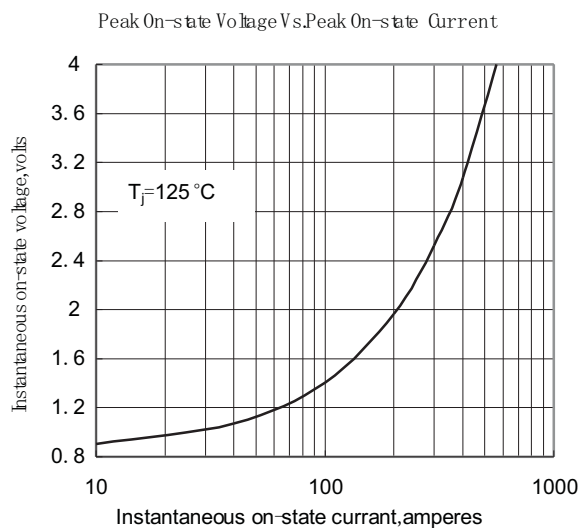


Fig. 1

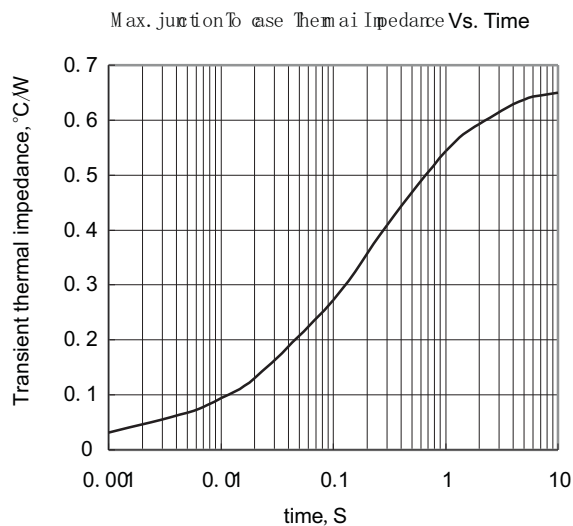


Fig. 2

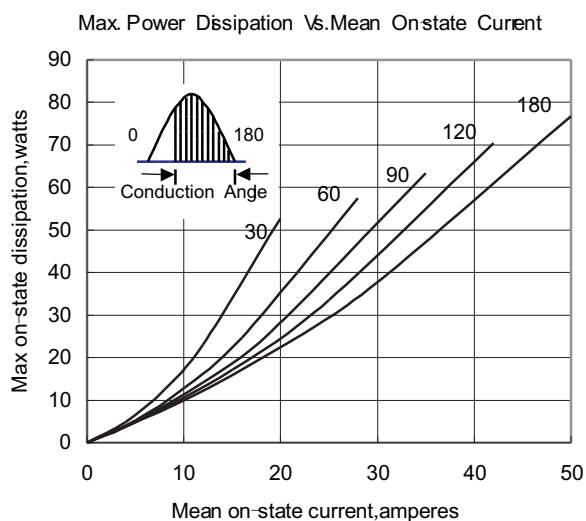


Fig. 3

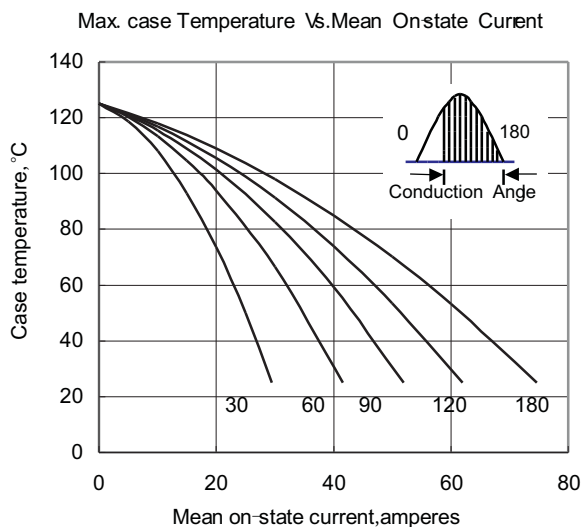


Fig. 4

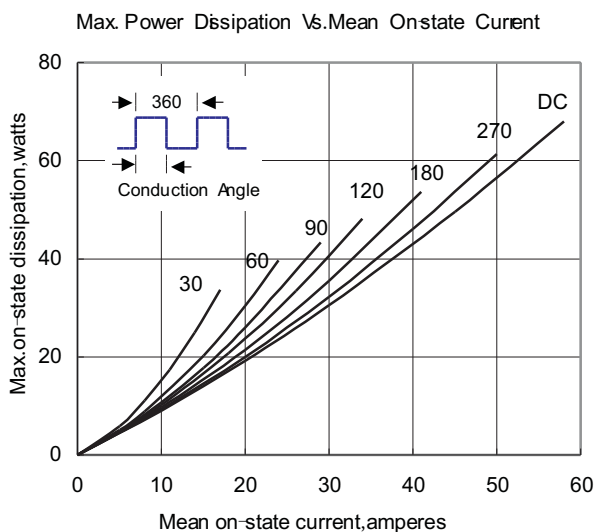


Fig. 5

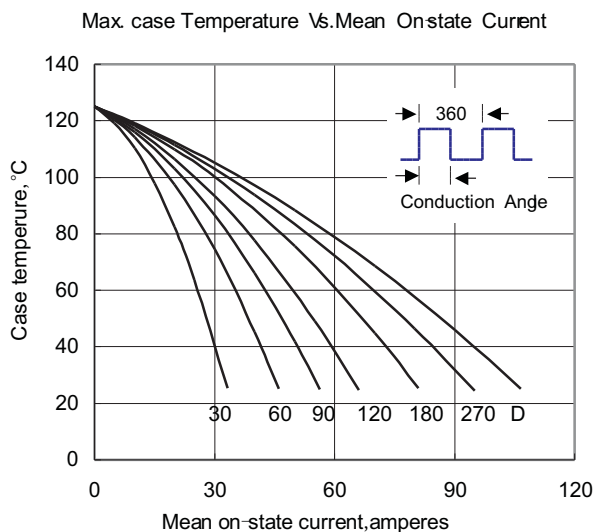


Fig. 6

Rating and Characteristic

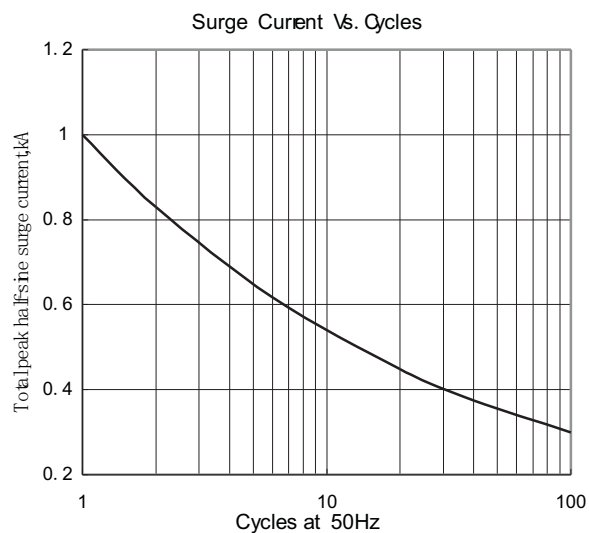


Fig. 7

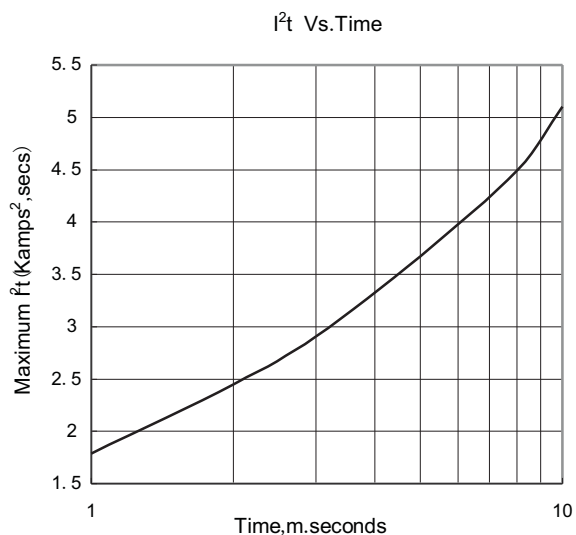


Fig. 8

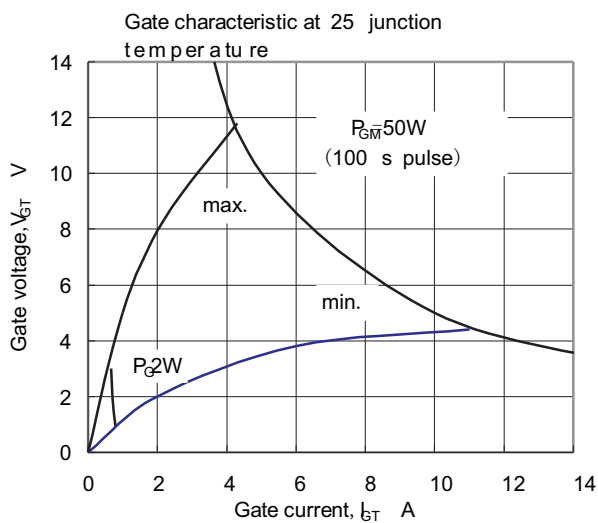


Fig. 9

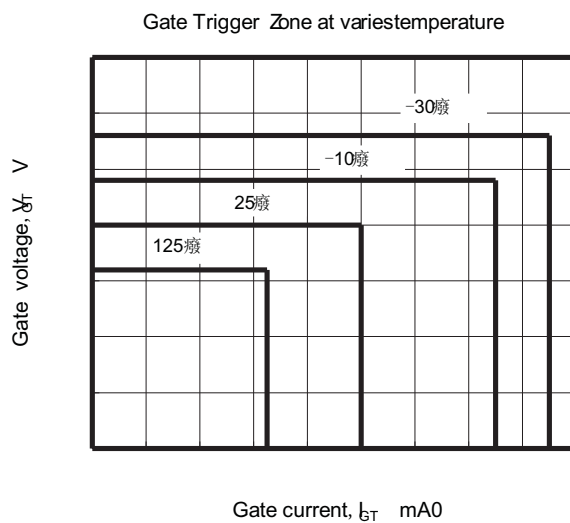


Fig. 10

Outside Dimension

