

产品规格书

Specifcation of products

产品名称: 单项可控桥式模块

产品型号: MFQ100A-T12

浙江世菱半导体有限公司
ZHEJIANG SHILING SEMICONDUCTOR CO., LTD.

地址: 浙江省 丽水市 莲都区

电话: (0578) 3615066

邮编: 323000

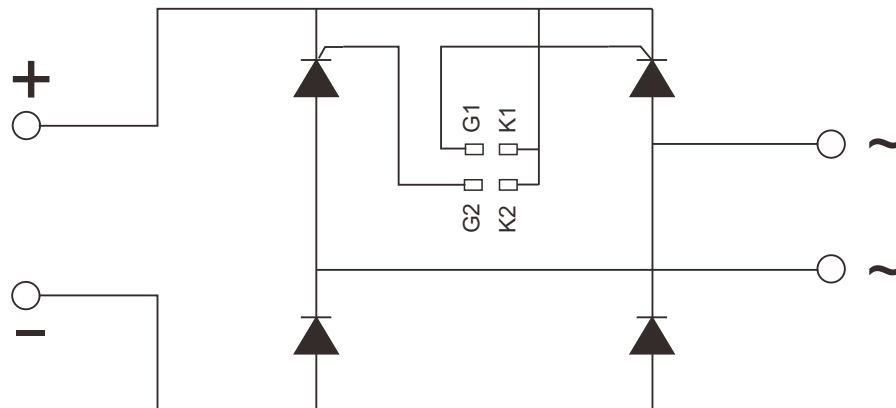
E-mail: smrshiling12@163.com

Http://www.smrshiling.com

拟制	审核	核准
蓝少波	陈一凡	曹剑龙

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°C	125			100	A
I _{T(RMS)}	RMS on-state current	Single side cooled, T _C =85°C	125			157	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		2000	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			5	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			2. 10	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}				12. 20	A ² s*10 ³
V _{TO}	Threshold voltage		125			0. 85	V
r _T	On-state slop resistance					5. 57	m Ω
V _{FM}	Peak forward voltage	I _{FM} =100A	25			1.10	V
V _{TM}	Peak on-state voltage	I _{TM} = 100A	25			1.40	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			700	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 (M5)					4.0	N.m
	Mounting torque(M6)					5.0	N.m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight						g
Outline							

OUTLINE DR AWING & CIRCUIT DIAGRAM



Rating and Characteristic

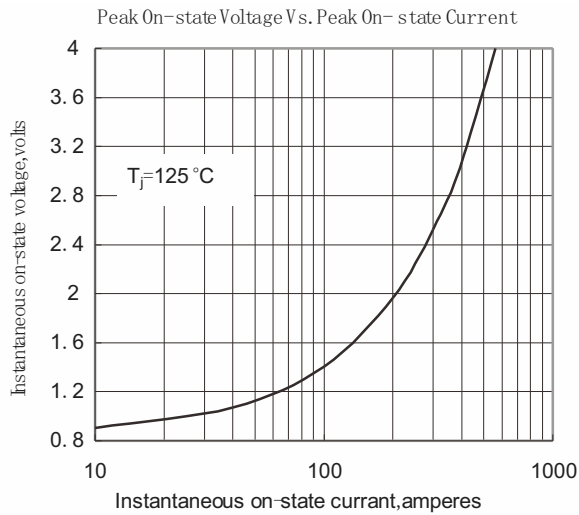


Fig. 1

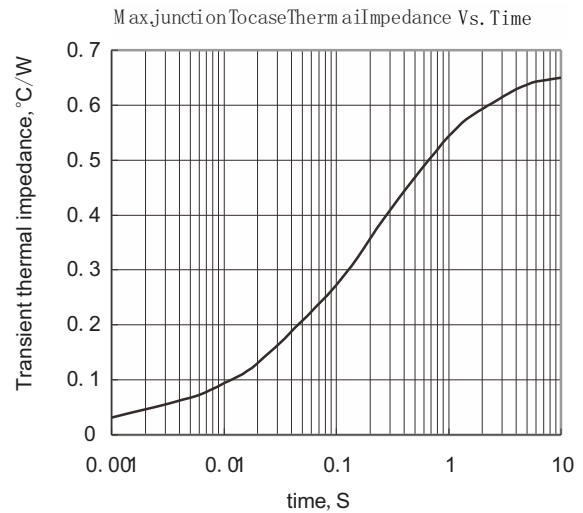


Fig. 2

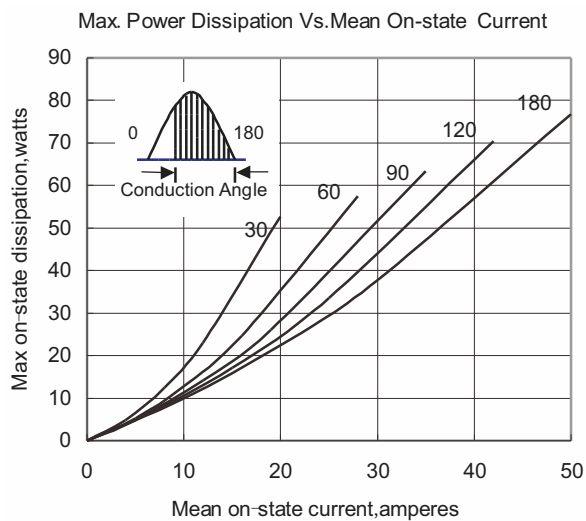


Fig. 3

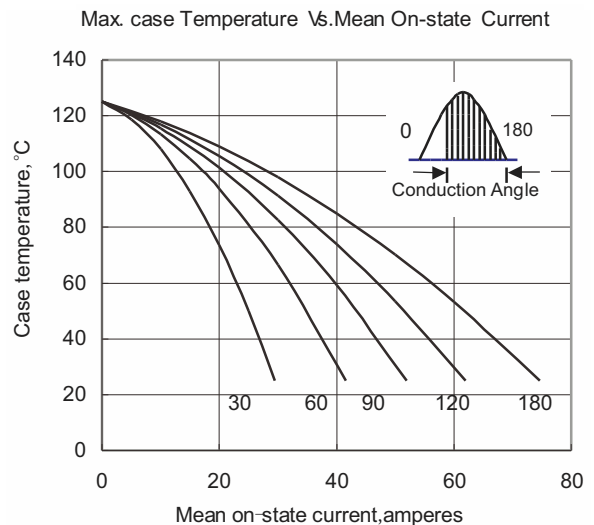


Fig. 4

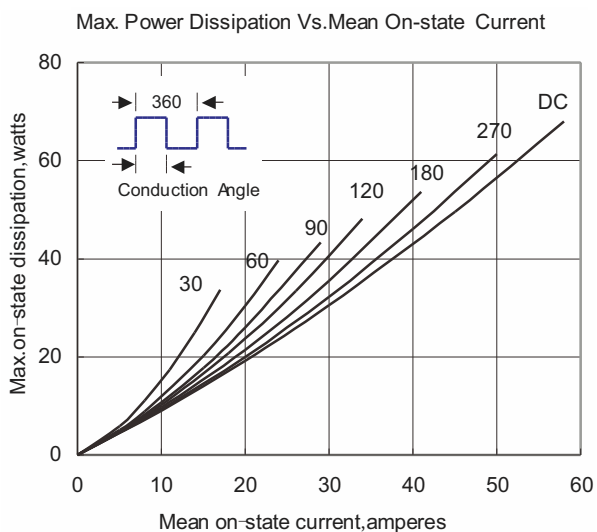


Fig. 5

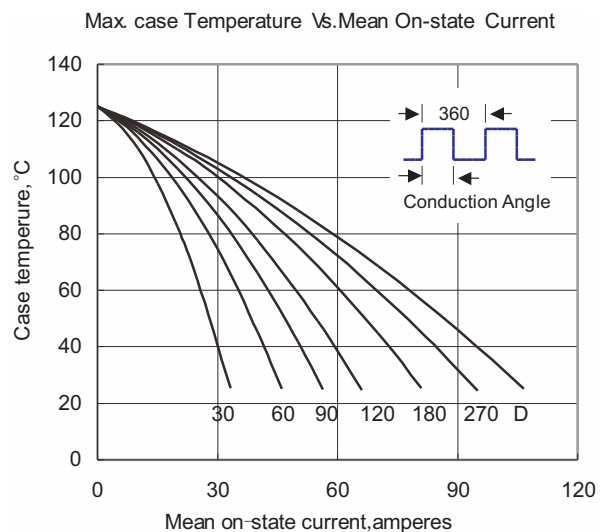


Fig. 6

Rating and Characteristic

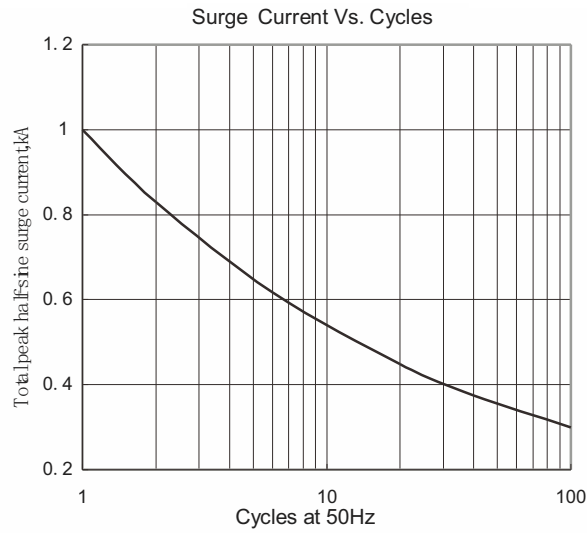


Fig. 7

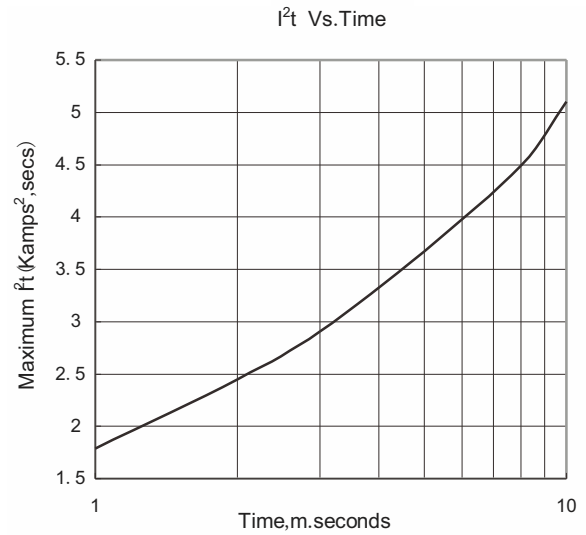


Fig. 8

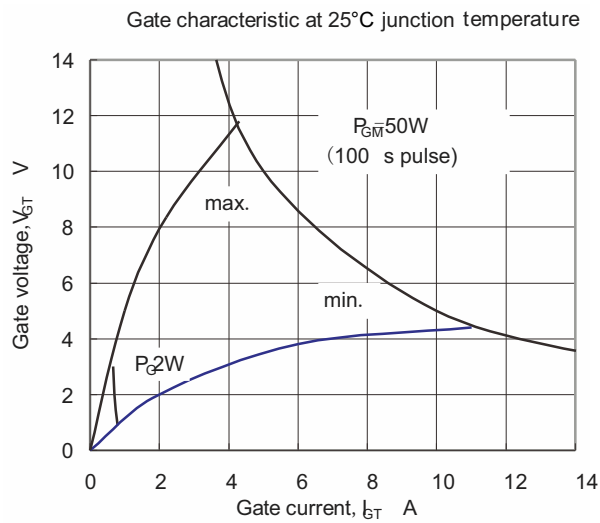


Fig. 9

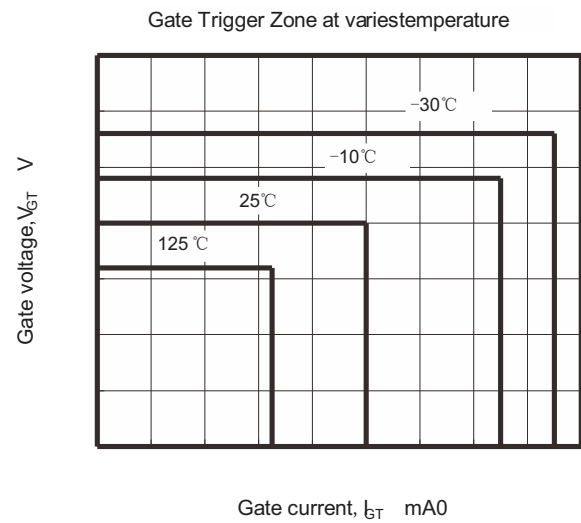


Fig. 10

Outside Dimension

