

## 产品规格书

### Specification of products

产品名称:快速单相整流桥

产品型号:MFQ100U18N-H5

浙江世菱半导体有限公司  
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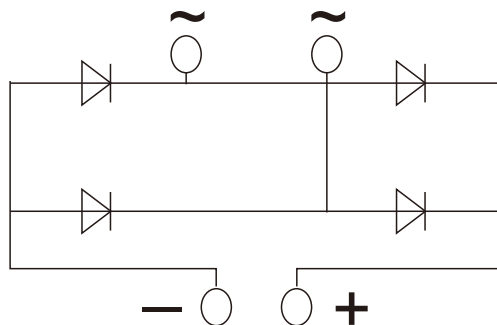
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拟制	审核	核准
林益龙	曹剑龙	宗瑞

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>o</sub>	DC output current	Single-phase full wave rectifying circuit, T <sub>c</sub> =100°C	125		100		A
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>DRM</sub> &V <sub>RRM</sub>	125		1800		V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	125			0.3	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	125			1.0	KA
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination					6.08	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		125			0.75	V
r <sub>F</sub>	Forward slop resistance					4.0	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =100A	25			1.75	V
t <sub>rr</sub>	Reverse Recove ry Tei m	I <sub>F</sub> =1A, V <sub>R</sub> =30V, di <sub>F</sub> /dt=-200A/μs				140	ns
R <sub>th(j-c)</sub>	Thermal resistance Junction to heatsink	Single side cooled				0.150	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz,R.M.S,t=1min,I <sub>iso</sub> :1mA(max)		3000			V
F <sub>m</sub>	Terminal connection torque(M6)				5.0		N.m
	Mounting torque(M6)				5.0		N.m
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				155		g
Outline							

### OUTLINE DRAWING & CIRCUIT DIAGRAM



## Rating and Characteristic

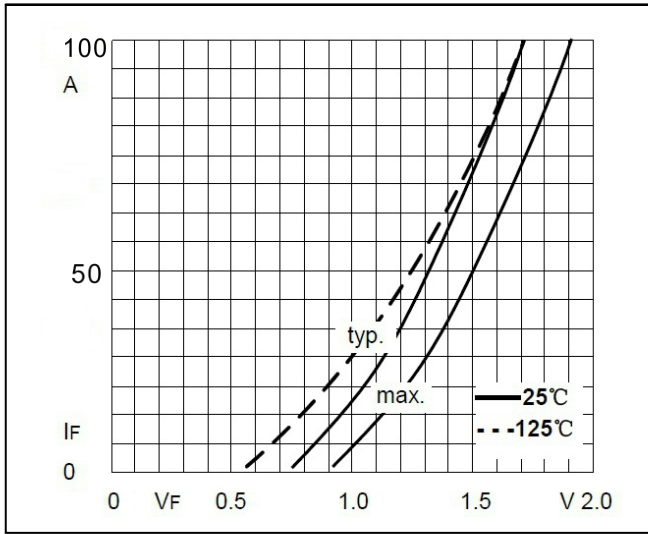


Fig1. Forward Characteristics

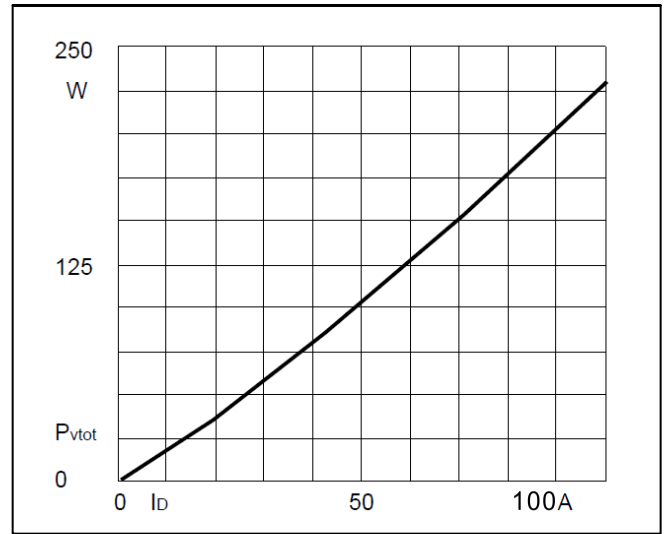


Fig2. Power dissipation

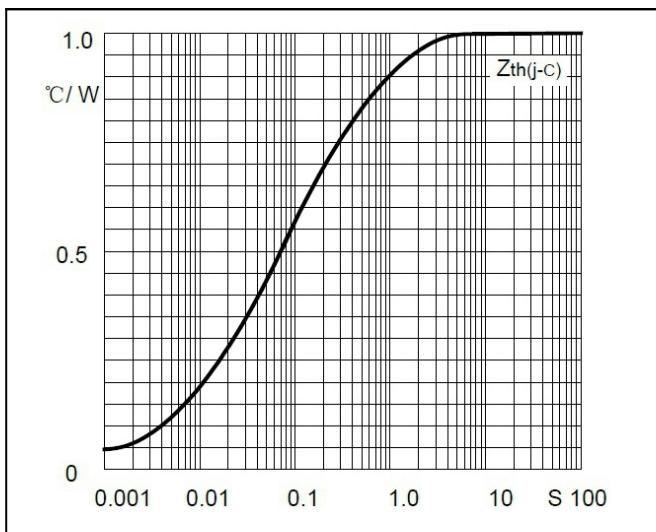


Fig3. Transient thermal impedance

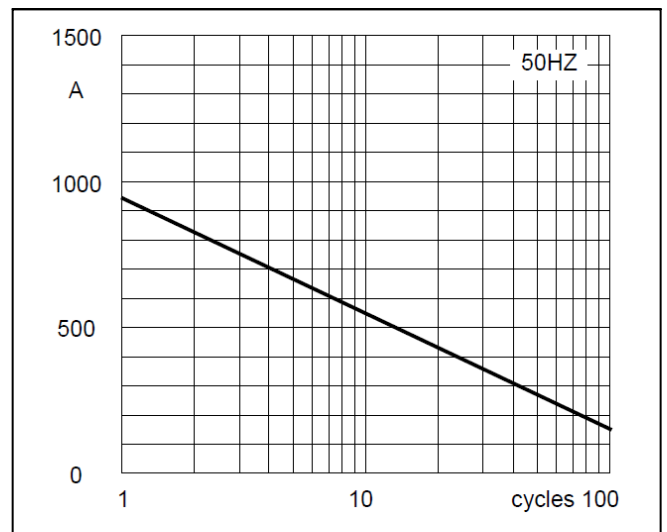


Fig4. Max Non-Repetitive Forward Surge Current

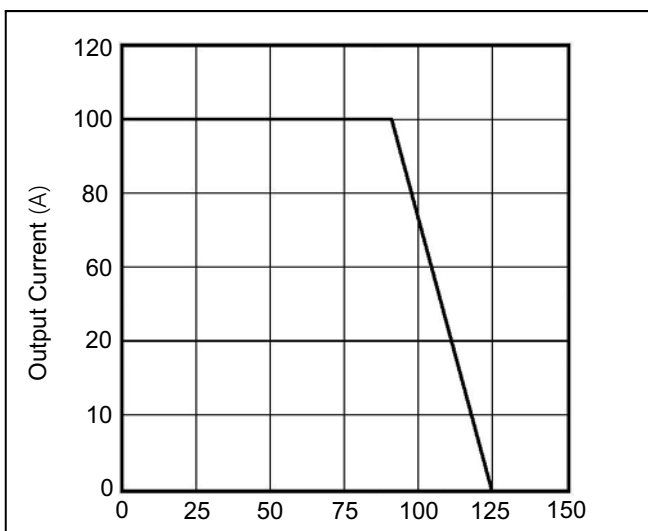


Fig5. Forward Current Derating Curve

## Package Outline Information

