

## 产品规格书

Specification of products

产品名称:快速单相整流桥

产品型号:MFQ150U6NH5

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) 3012571 3615078

传真:(0578) 3611180

邮编: 323000

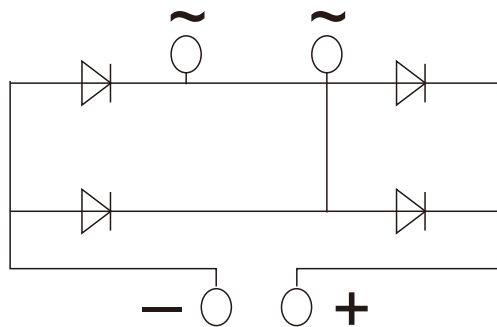
E-mail:smrshiling01@163.com

Http://www.smrshiling.com

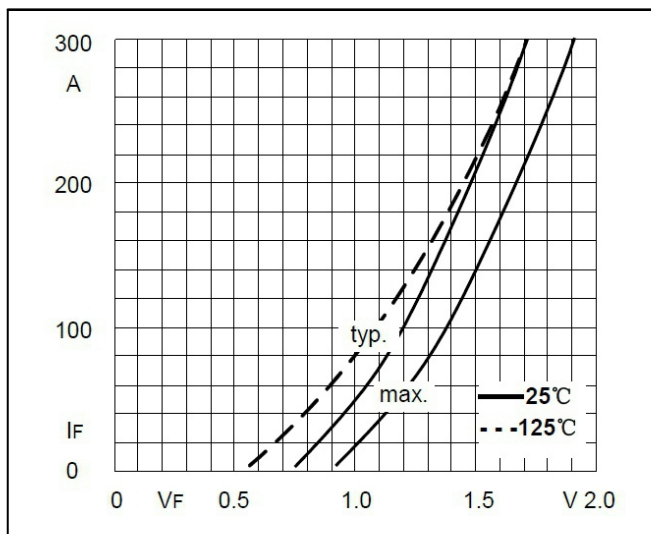
|     |     |    |
|-----|-----|----|
| 拟制  | 审核  | 核准 |
| 林益龙 | 曹剑龙 | 宗瑞 |

| SYMBOL               | CHARACTERISTIC                           | TEST CONDITONS  | 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                 |       | 150  |       | A     |
| V <sub>RRM</sub>     | Repetitive peak reverse voltage          | V <sub>RRM</sub> tp=10ms<br>V <sub>RSM</sub> = V <sub>DRM</sub> &V <sub>RRM</sub> +200V | 125                 |       | 600  |       | V     |
| I <sub>RRM</sub>     | Repetitive peak current                  | at V <sub>RRM</sub>   | 125                 |       |      | 5     | mA    |
| I <sub>FSM</sub>     | Surge forward current                    | 10ms half sine wave   | 125                 |       |      | 1.5   | KA    |
| I <sup>2</sup> t     | I <sup>2</sup> T for fusing coordination | V <sub>R</sub> =0.6V <sub>RRM</sub>   |                     |       |      |       | 3.32  |
| V <sub>FO</sub>      | Threshold voltage                        |   | 125                 |       |      | 0.80  | V     |
| r <sub>F</sub>       | Forward slop resistance                  |   |                     |       |      |       | 4.0   |
| V <sub>FM</sub>      | Peak forward voltage                     | I <sub>FM</sub> =150A   | 25                  |       |      | 1.40  | 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                   |                     |       |      | 65    | 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              |  |   |                     |       |      |       |       |

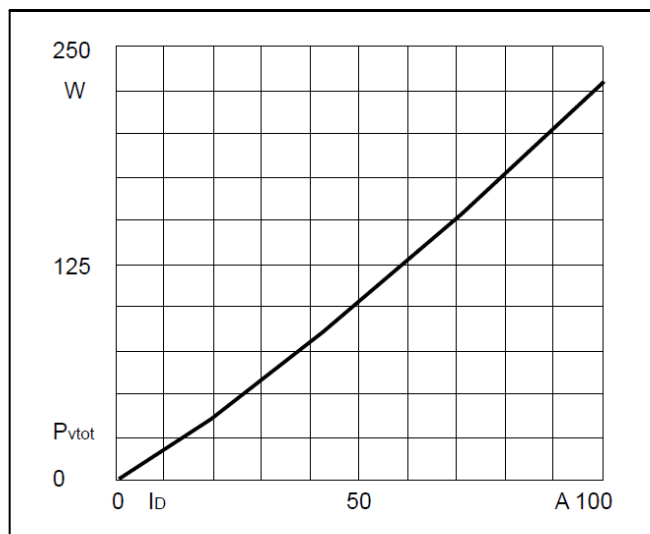
### OUTLINE DRAWING & CIRCUIT DIAGRAM



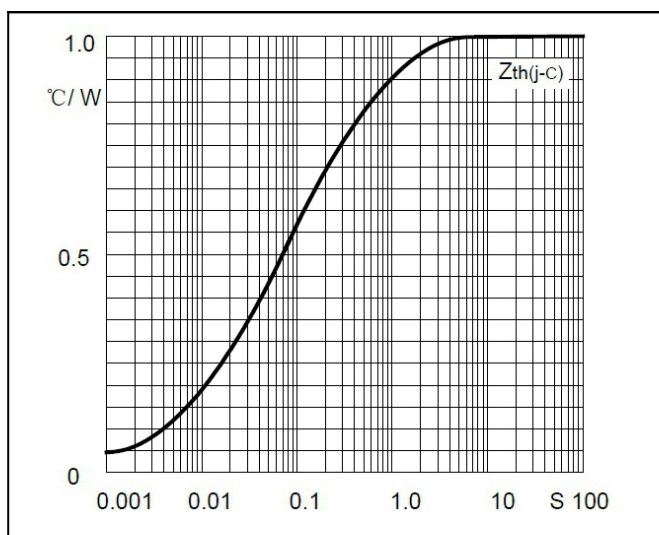
## Rating and Characteristic



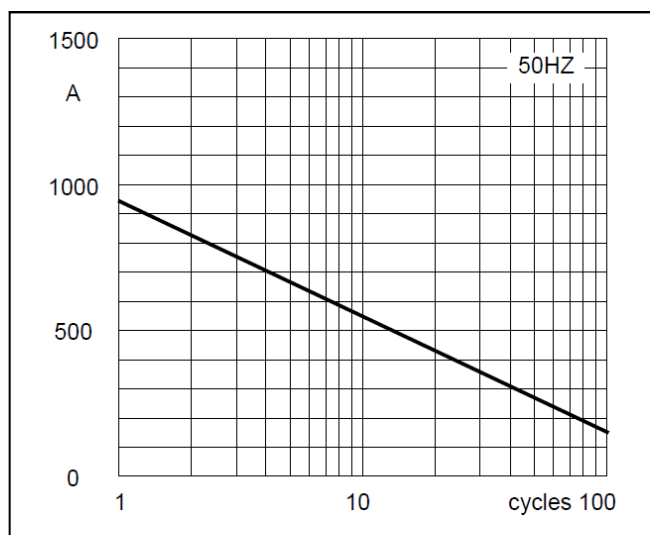
**Fig1. Forward Characteristics**



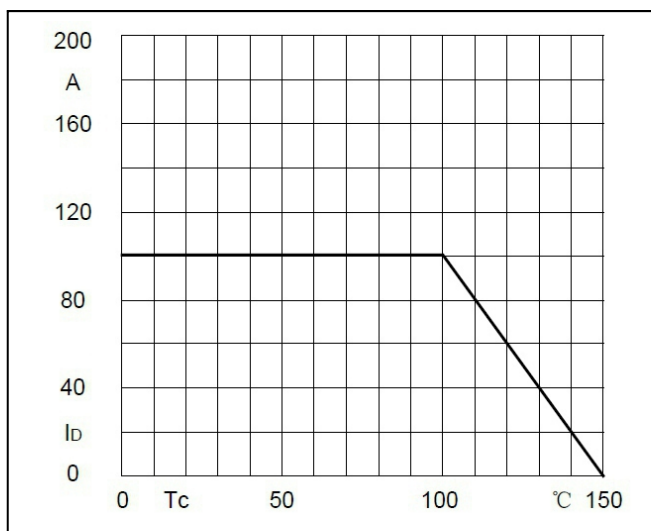
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**

## Package Outline Information

