

**Features:**

- Super fast recovery
- Low forward voltage
- Low leakage current
- Popular module package

**Typical Applications**

- Inverter welding power supply
- Power supply for telecommunication
- Various switching power supply

| V <sub>RRM</sub> | Type & Outline |
|------------------|----------------|
| 200V             | MUR20020-302H3 |

| SYMBOL               | CHARACTERISTIC                         | TEST CONDITIONS   | T <sub>f</sub> (°C) | VALUE |      |      | UNIT |
|----------------------|--|---|---------------------|-------|------|------|------|
|                      |  |   |                     | Min   | Type | Max  |      |
| I <sub>F(AV)</sub>   | Maximum average forward current        | Single side cooled, T <sub>C</sub> =100°C<br>Per Module.          | 150                 |       |      | 200  | A    |
| V <sub>RRM</sub>     | Repetitive peak voltage                | tp=10ms   | 25                  |       |      | 200  | V    |
| I <sub>RRM</sub>     | Repetitive peak current                | V <sub>RM</sub> =200V   | 150                 |       |      | 500  | μA   |
|                      |  |   | 25                  |       |      | 10   | μA   |
| I <sub>FSM</sub>     | Surge forward current                  | Per Diode , 8.3ms half sine wave                                  | 25                  |       |      | 1.1  | kA   |
| V <sub>FM</sub>      | Peak forward voltage                   | Per Diode @I <sub>FM</sub> =100A                                  | 125                 |       | 1.1  | 1.2  | V    |
|                      |  |   | 25                  |       | 1.2  | 1.4  | V    |
| trr                  | Reverse Recovery Time                  | I <sub>F</sub> =0.5A, I <sub>RM</sub> =1A, I <sub>RR</sub> =0.25A | 125                 |       | 80   | 120  | ns   |
|                      |  |   | 25                  |       | 60   | 80   | ns   |
| C <sub>J</sub>       | Junction Capacitance                   | V <sub>R</sub> =200V  |                     |       | 35   |      | pF   |
| R <sub>th(j-c)</sub> | Thermal resistance<br>Junction to case | Per Diode , Single side cooled                                    |                     |       |      | 0.40 | °C/W |
| T <sub>vj</sub>      | Junction temperature                   |   |                     | -55   |      | 150  | °C   |
| T <sub>stg</sub>     | Stored temperature                     |   |                     | -55   |      | 125  | °C   |
| F <sub>m</sub>       | Terminal connection torque(M6)         |   |                     |       | 5.0  |      | N·m  |
|                      | Mounting torque(M6)                    |   |                     |       | 5.0  |      | N·m  |
| W <sub>t</sub>       | Weight                                 |   |                     |       | 69   |      | g    |
| Outline              | 302H3                                  |   |                     |       |      |      |      |

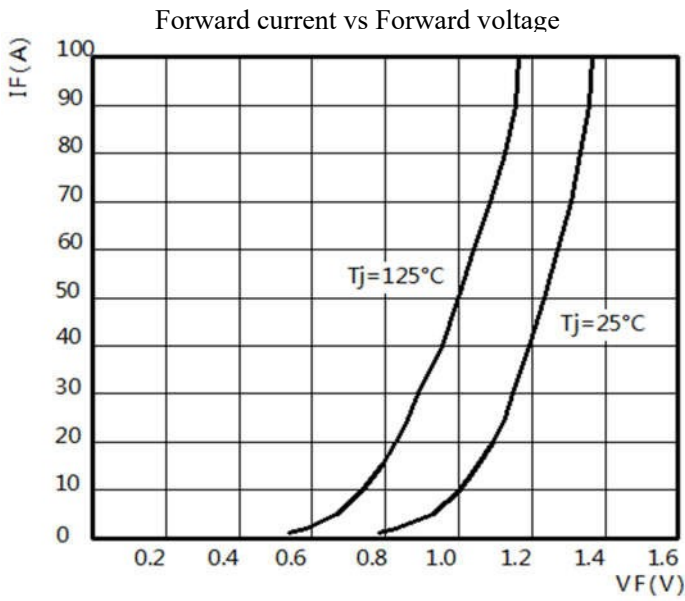


Fig.1

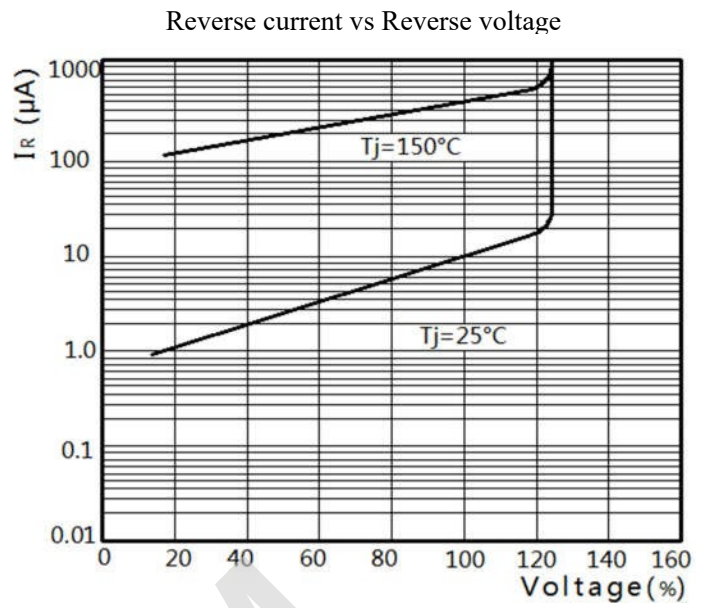


Fig.2

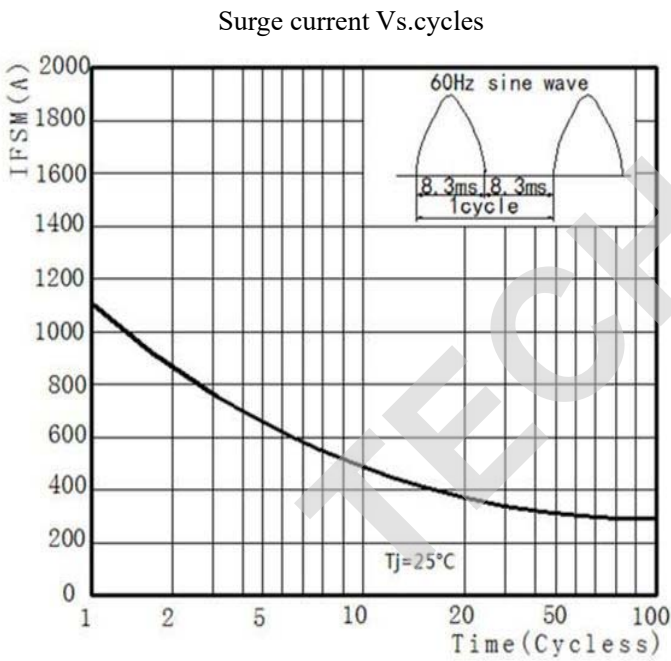


Fig.3

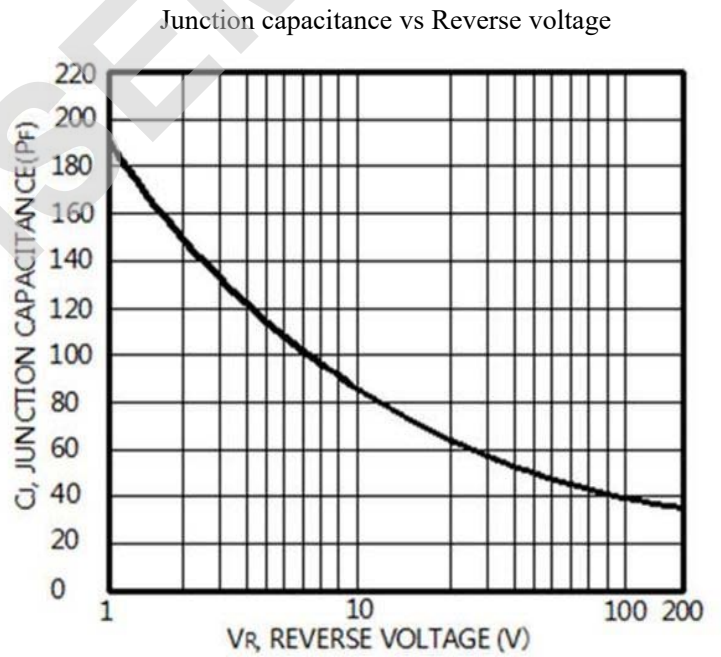
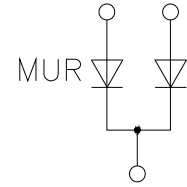
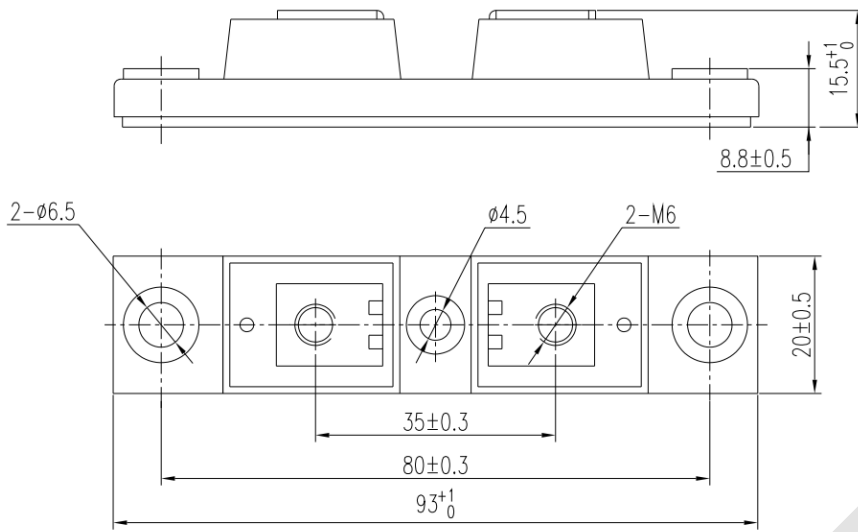


Fig.4

Outline:



Unmarked dimensional tolerance:  $\pm 0.5$ mm

TECHSEM