



SANYO Semiconductors

## DATA SHEET

# SS10015M

 Schottky Barrier Diode  
**15V, 1A Rectifier**

## Applications

- High frequency rectification (switching regulators, converters, choppers).

## Features

- Low forward voltage ( $I_F=0.3A$ ,  $V_F \text{ max}=0.32V$ ) ( $I_F=0.5A$ ,  $V_F \text{ max}=0.35V$ ).
- Ultrasmall package permitting applied sets to be small and slim (mounting height 0.85mm).

## Specifications

### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| Parameter                                | Symbol    | Conditions              | Ratings     | Unit             |
|--|-----------|-------------------------|-------------|------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |                         | 15          | V                |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                         | 15          | V                |
| Average Output Current                   | $I_O$     |                         | 1           | A                |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1 cycle | 10          | A                |
| Junction Temperature                     | $T_J$     |                         | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature                      | $T_{stg}$ |                         | -55 to +125 | $^\circ\text{C}$ |

### Electrical Characteristics at $T_a=25^\circ\text{C}$

| Parameter                 | Symbol        | Conditions   | Ratings |      |      | Unit                        |
|---------------------------|---------------|--|---------|------|------|-----------------------------|
|                           |               |  | min     | typ  | max  |                             |
| Reverse Voltage           | $V_R$         | $I_R=0.5mA$  | 15      |      |      | V                           |
| Forward Voltage           | $V_{F1}$      | $I_F=0.3A$   |         | 0.30 | 0.32 | V                           |
|                           | $V_{F2}$      | $I_F=0.5A$   |         | 0.32 | 0.35 | V                           |
| Reverse Current           | $I_R$         | $V_R=6V$   |         |      | 90   | $\mu\text{A}$               |
| Interterminal Capacitance | $C$           | $V_R=10V$ , $f=1MHz$                                   |         | 20   |      | pF                          |
| Reverse Recovery Time     | $t_{rr}$      | $I_F=I_R=100mA$ , See specified Test Circuit.          |         |      | 10   | ns                          |
| Thermal Resistance        | $R_{th(j-a)}$ | Mounted on a ceramic board (600mm <sup>2</sup> X0.8mm) |         | 138  |      | $^\circ\text{C} / \text{W}$ |

Marking : SF

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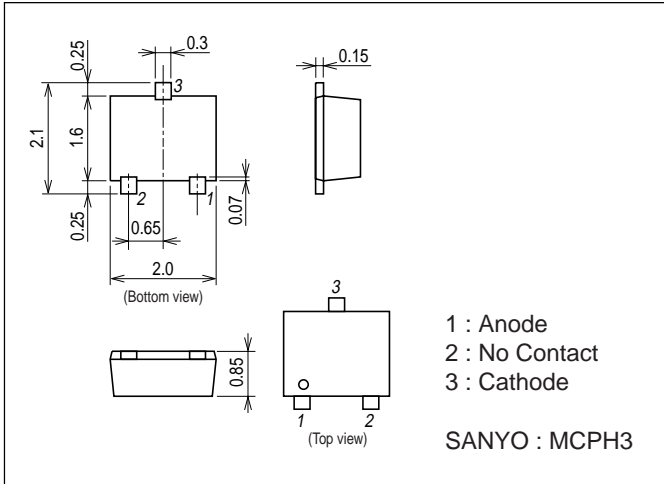
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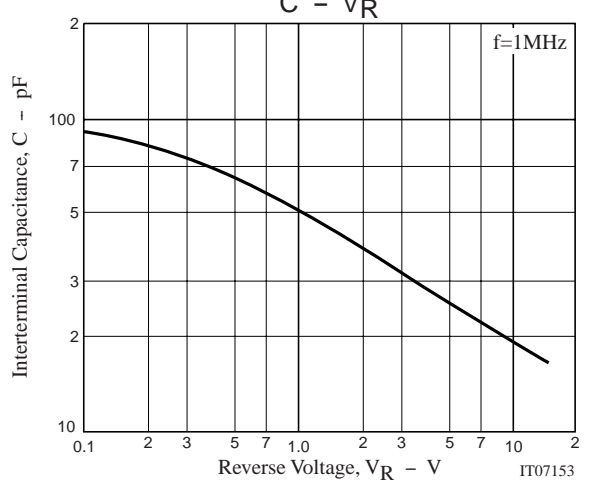
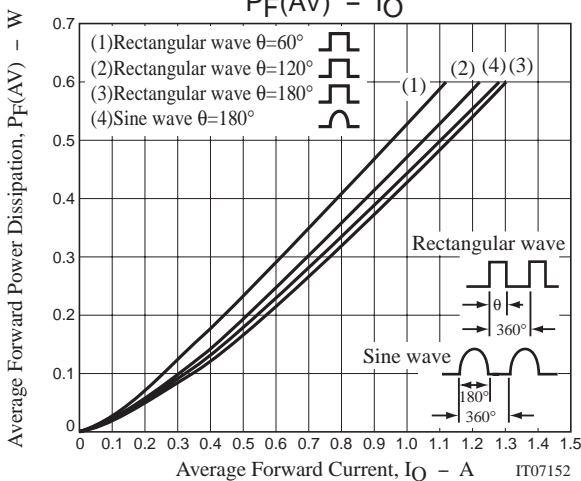
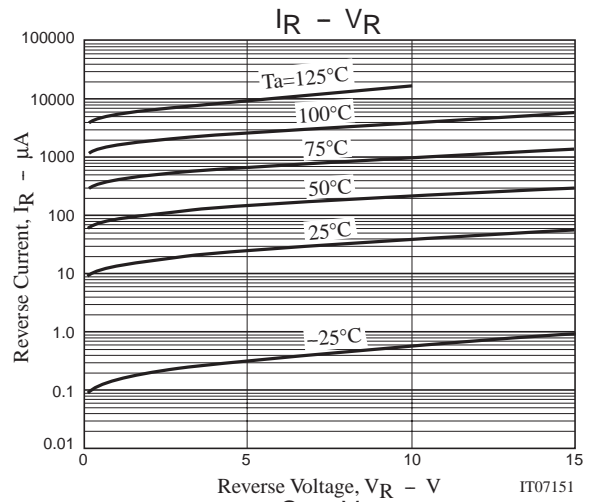
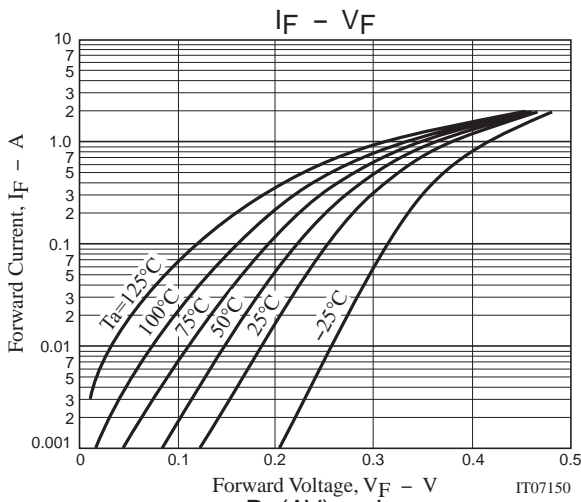
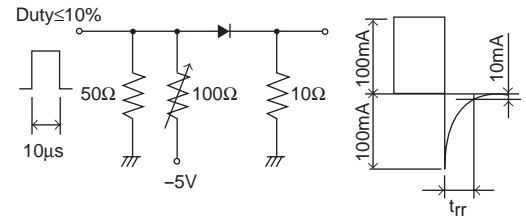
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## Package Dimensions

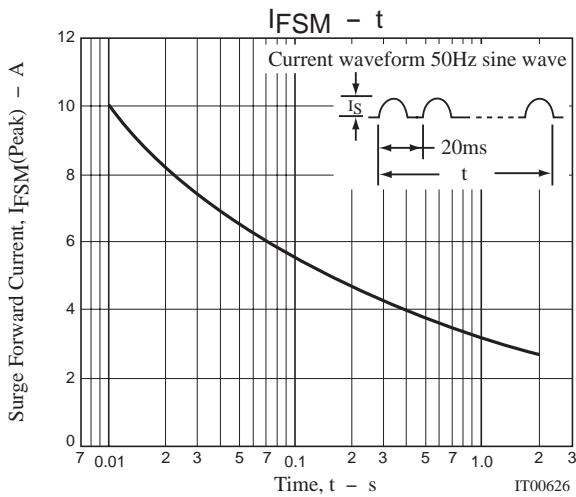
unit : mm  
1305A



## trr Test Circuit



## SS10015M



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