

**SANYO****SB07-015C**

Shottky Barrier Diode

**15V, 700mA Rectifier****Applications**

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

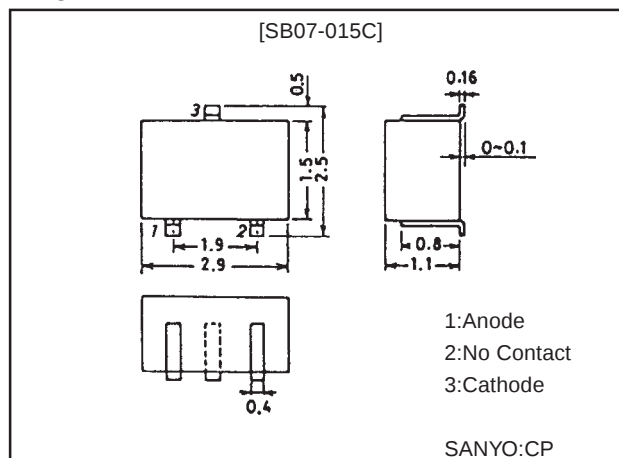
**Features**

- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time ( $t_{rr}$  max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Small-sized package, permitting SB07-015C-applied sets to be compact and slim.

**Package Dimensions**

unit:mm

1148A

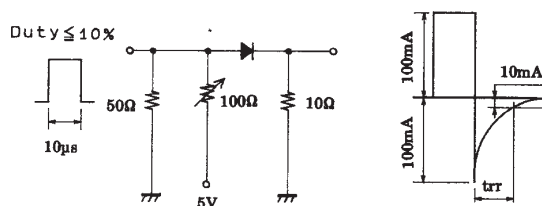
**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

| Parameter                                | Symbol    | Conditions             | Ratings     | Unit             |
|------------------------------------------|-----------|------------------------|-------------|------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |                        | 15          | V                |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                        | 17          | V                |
| Average Output Current                   | $I_O$     |                        | 700         | mA               |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1cycle | 5           | A                |
| Junction Temperature                     | $T_j$     |                        | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature                      | $T_{stg}$ |                        | -55 to +125 | $^\circ\text{C}$ |

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

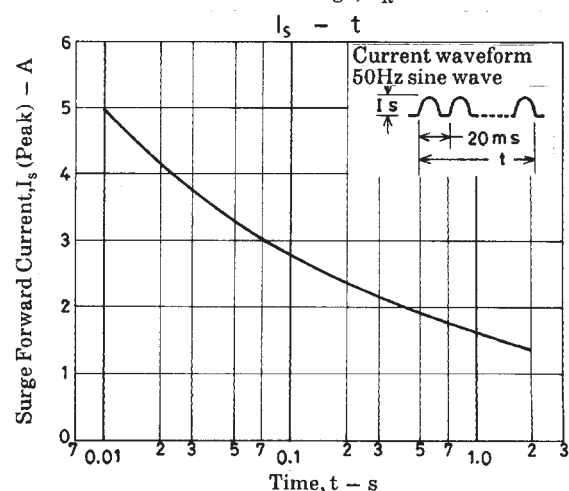
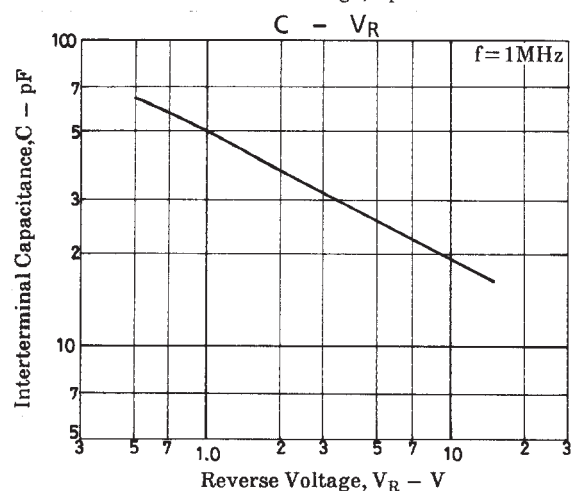
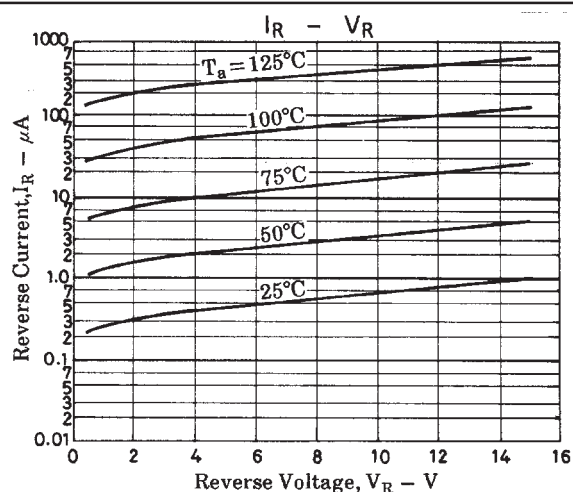
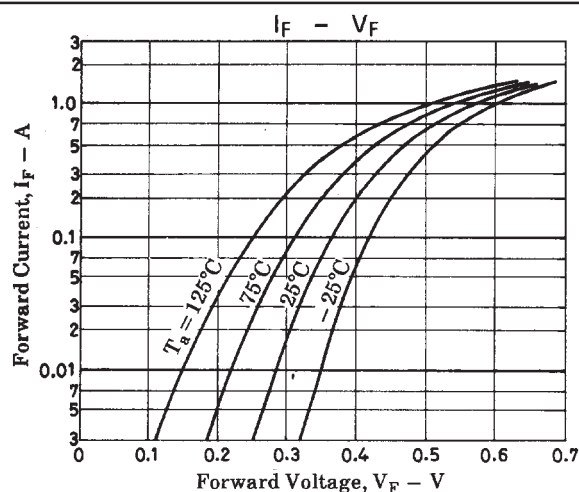
| Parameter                 | Symbol      | Conditions                                         | Ratings |     |      | Unit               |
|---------------------------|-------------|----------------------------------------------------|---------|-----|------|--------------------|
|                           |             |                                                    | min     | typ | max  |                    |
| Reverse Voltage           | $V_R$       | $I_R=150\mu\text{A}$                               | 15      |     |      | V                  |
| Forward Voltage           | $V_F(1)$    | $I_F=700\text{mA}$                                 |         |     | 0.55 | V                  |
|                           | $V_F(2)$    | $I_F=100\text{mA}$                                 |         |     | 0.42 | V                  |
| Reverse Current           | $I_R$       | $V_R=-15\text{V}$                                  |         |     | 20   | $\mu\text{A}$      |
| Interterminal Capacitance | C           | $V_R=-10\text{V}$ , $f=1\text{MHz}$                |         | 20  |      | pF                 |
| Reverse Recovery Time     | $t_{rr}$    | $I_F=I_R=10\text{mA}$ , See specified Test Circuit |         |     | 10   | ns                 |
| Thermal Resistance        | $R_{thj-a}$ |                                                    |         | 560 |      | $^\circ\text{C/W}$ |

- Marking:R

 **$t_{rr}$  Test Circuit****SANYO Electric Co.,Ltd. Semiconductor Business Headquarters**

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