

**SANYO****SB007T03Q**

Schottky Barrier Diode (Series Connection)

**30V, 70mA Rectifier****Applications**

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

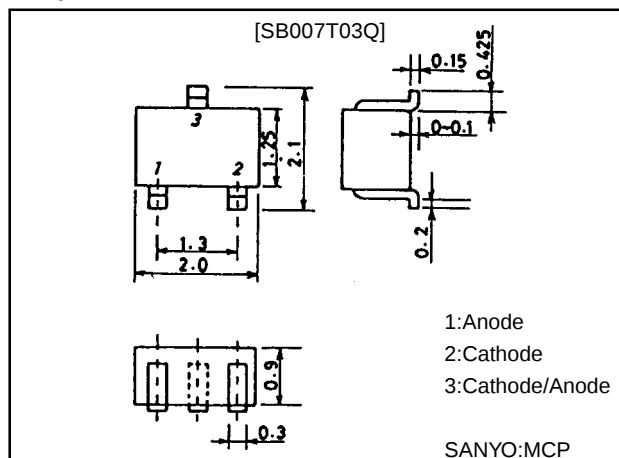
**Features**

- 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.
- Series connection of 2 elements in an ultrasmall-sized package facilitates high-density mounting and permits SB007T03Q-applied equipment to be made smaller.

**Package Dimensions**

unit:mm

1246A

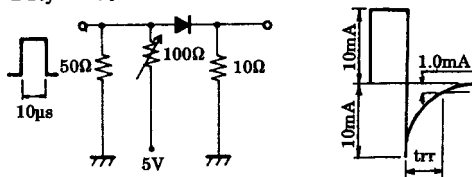
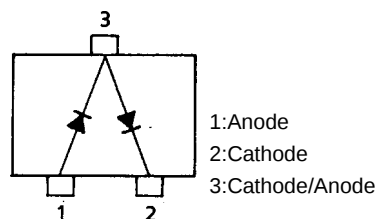
**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

| Parameter                                 | Symbol    | Conditions              | Ratings     | Unit             |
|-------------------------------------------|-----------|-------------------------|-------------|------------------|
| Repetitive Peak Reverse Voltage           | $V_{RRM}$ |                         | 30          | V                |
| Non-repetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                         | 35          | V                |
| Average Output Current                    | $I_O$     |                         | 70          | mA               |
| Surge Forward Current                     | $I_{FSM}$ | 50Hz sine wave, 1 cycle | 2           | A                |
| Junction Temperature                      | $T_j$     |                         | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature                       | $T_{stg}$ |                         | -55 to +125 | $^\circ\text{C}$ |

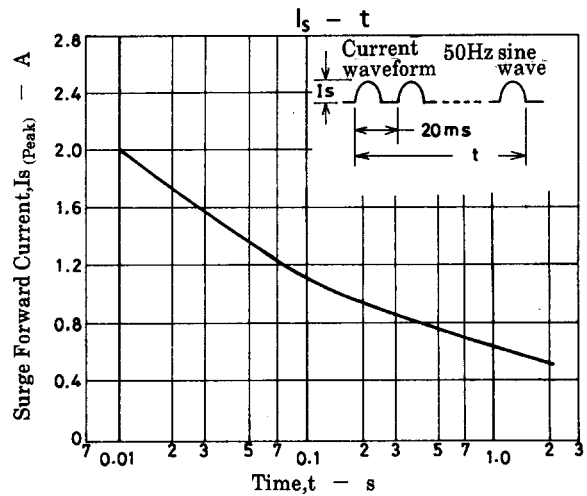
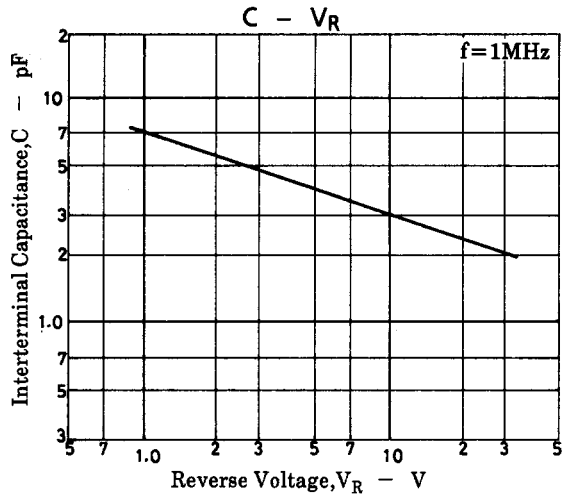
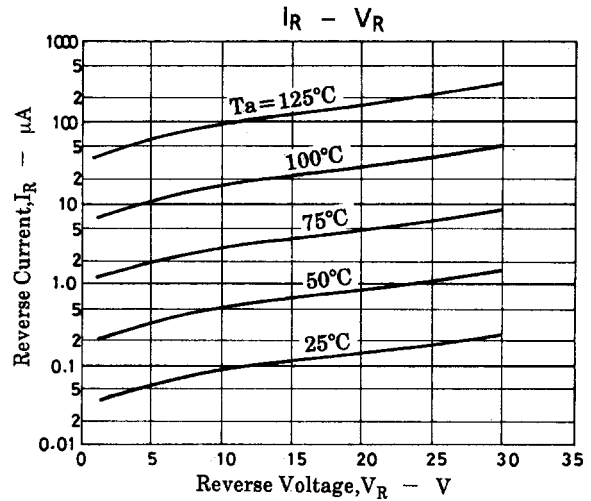
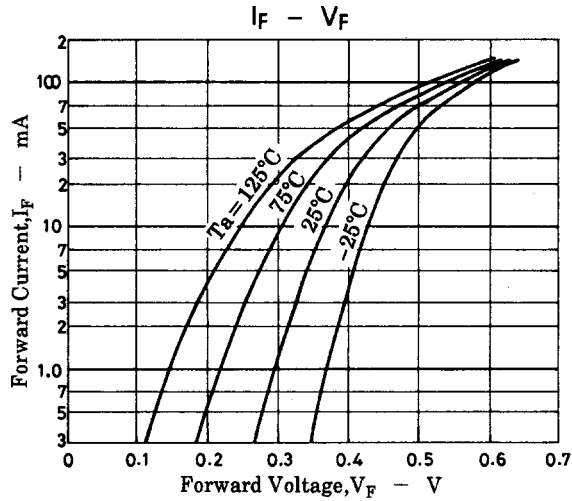
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

| Parameter                 | Symbol        | Conditions                                         | Ratings |     |      | Unit               |
|---------------------------|---------------|----------------------------------------------------|---------|-----|------|--------------------|
|                           |               |                                                    | min     | typ | max  |                    |
| Reverse Voltage           | $V_R$         | $I_R=20\mu\text{A}$                                | 30      |     |      | V                  |
| Forward Voltage           | $V_F$         | $I_F=70\text{mA}$                                  |         |     | 0.55 | V                  |
| Reverse Current           | $I_R$         | $V_R=15\text{V}$                                   |         |     | 5    | $\mu\text{A}$      |
| Interterminal Capacitance | $C$           | $V_R=10\text{V}$ , $f=1\text{MHz}$                 |         | 3.0 |      | pF                 |
| Reverse Recovery Time     | $t_{rr}$      | $I_F=I_R=10\text{mA}$ , See specified Test Circuit |         |     | 10   | ns                 |
| Thermal Resistance        | $R_{th(j-a)}$ |                                                    |         | 650 |      | $^\circ\text{C/W}$ |

Marking : N

 **$t_{rr}$  Test Circuit**Duty  $\leq 10\%$ **Electrical Connection**

(Top view)



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