

**SANYO****SB01-05Q**

Shottky Barrier Diode

**50V, 100mA Rectifier****Applications**

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

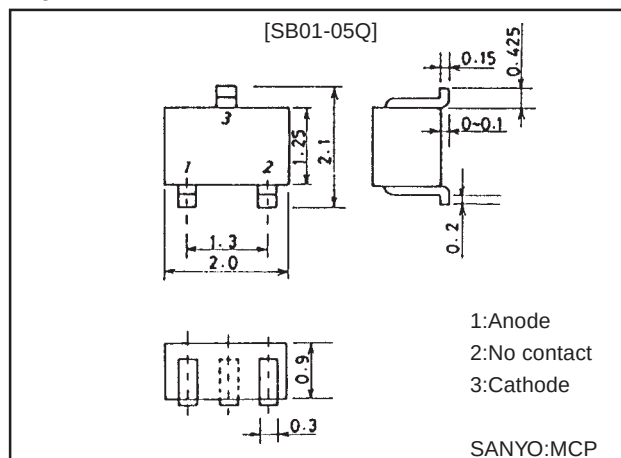
**Features**

- 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.
- Very small-sized package, permitting SB01-05Q-applied sets to be compact and slim.

**Package Dimensions**

unit:mm

1197A

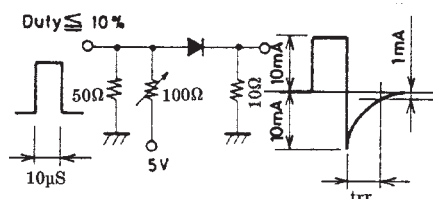
**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

| Parameter                                | Symbol    | Conditions             | Ratings     | Unit             |
|------------------------------------------|-----------|------------------------|-------------|------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |                        | 50          | V                |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                        | 55          | V                |
| Average Output Current                   | $I_O$     |                        | 100         | mA               |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1cycle | 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  $T_a = 25^\circ\text{C}$** 

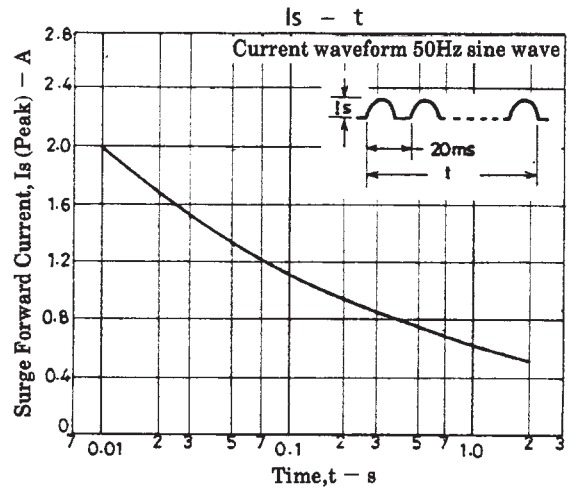
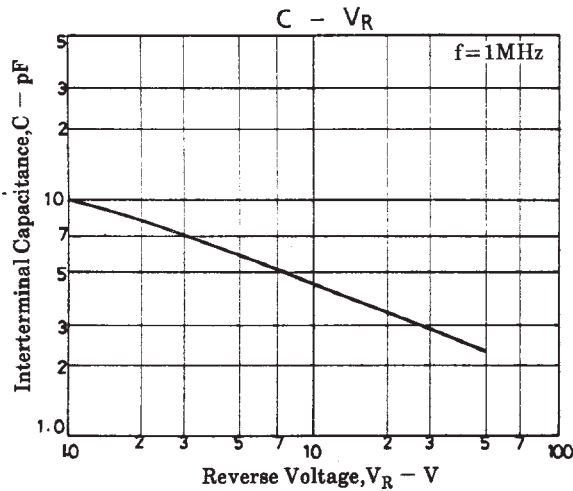
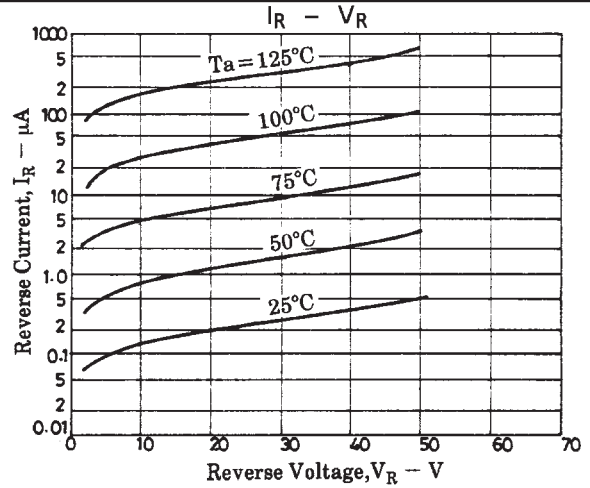
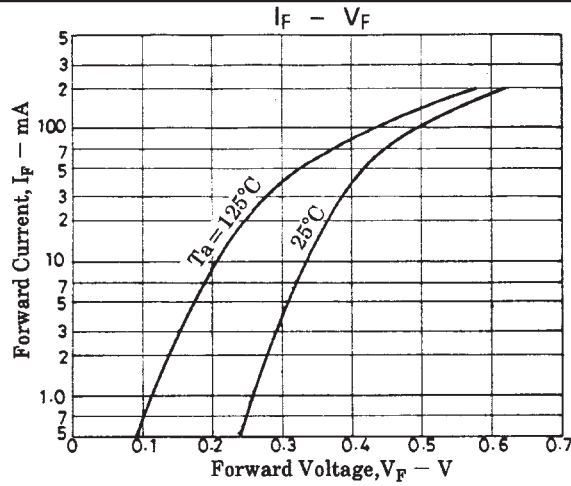
| Parameter                 | Symbol   | Conditions                                         | Ratings |     |      | Unit          |
|---------------------------|----------|----------------------------------------------------|---------|-----|------|---------------|
|                           |          |                                                    | min     | typ | max  |               |
| Reverse Voltage           | $V_R$    | $I_R=50\mu\text{A}$                                | 50      |     |      | V             |
| Forward Voltage           | $V_F$    | $I_F=100\text{mA}$                                 |         |     | 0.55 | V             |
| Reverse Current           | $I_R$    | $V_R=25\text{V}$                                   |         |     | 15   | $\mu\text{A}$ |
| Interterminal Capacitance | C        | $V_R=10\text{V}$ , $f=1\text{MHz}$                 |         | 4.4 |      | pF            |
| Reverse Recovery Time     | $t_{rr}$ | $I_F=I_R=10\text{mA}$ , See specified Test Circuit |         |     | 10   | ns            |

- Marking:A

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

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