Ordering number : ENA0405A

SANYO Semiconductors
DATA SHEET

An ON Semiconductor Company

# SB007-03C — Schottky Barrier Diode 30V, 70mA Rectifier

## Applications

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

## Features

- Low forward voltage ($V_F$ max=0.55V).
- Fast reverse recorvery time ($t_{rr}$ max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

## Specifications

### Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | | 30 | V |
| Nonrepetitive 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 | Tj | | −55 to +125 | °C |
| Storage Temperature | Tstg | | −55 to +125 | °C |

Marking : G



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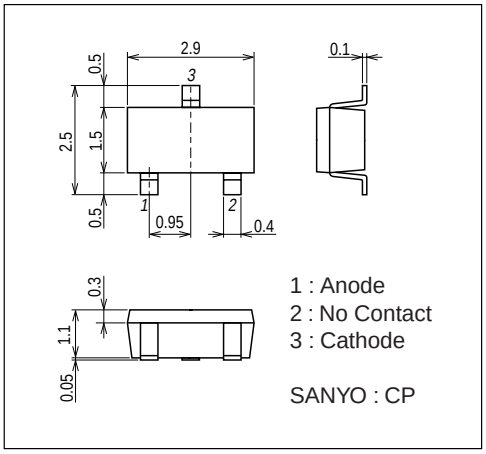
## Electrical Characteristics at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | min | typ | max | |
| Reverse Voltage | $V_R$ | $I_R$=20μA, Tj=25°C | 30 | | | V |
| Forward Voltage | $V_F$ | $I_F$=70mA, Tj=25°C | | | 0.55 | V |
| Reverse Current | $I_R$ | $V_R$=15V, Tj=25°C | | | 5 | μA |
| Interterminal Capacitance | C | $V_R$=10V, f=1MHz | | 3.0 | | pF |
| Reverse Recovery Time | $t_{rr}$ | $I_F$=$I_R$=10mA, Tj=25°C, See specified Test Circuit. | | | 10 | ns |
| Thermal Resistance | Rthj-a(1) | | | 620 | | °C / W |
| | Rthj-a(2) | Mounted in Cu-foiled area of 16mm²×0.2mm on glass epoxy board | | 430 | | °C / W |

### Package Dimensions

unit : mm (typ)

7013A-004




### $t_{rr}$ Test Circuit