



SANYO Semiconductors

DATA SHEET

SB0503EJ

 — Schottky Barrier Diode
30V, 500mA Rectifier

Applications

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

Features

- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultraminiature (1608 size) and thin (0.6mm) leadless package.

Specifications

Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|--|--------|-------------------------|-------------|------|
| Repetitive Peak Reverse Voltage | VRRM | | 30 | V |
| Nonrepetitive Peak Reverse Surge Voltage | VRSM | | 35 | V |
| Average Output Current | IO | | 500 | mA |
| Surge Forward Current | IFSM | 50Hz sine wave, 1 cycle | 5 | A |
| Junction Temperature | TJ | | -55 to +125 | °C |
| Storage Temperature | Tstg | | -55 to +125 | °C |

Electrical Characteristics at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|----------|---|---------|------|------|--------|
| | | | min | typ | max | |
| Reverse Voltage | VR | IR=150μA | 30 | | | V |
| Forward Voltage | VF | IF=500mA | | | 0.55 | V |
| Reverse Current | IR | VR=15V | | | 15 | μA |
| Reverse Recovery Time | trr | IF=IR=10mA, See specified Test Circuit. | | | 10 | ns |
| Interterminal Capacitance | C | VR=10V, f=1MHz | | 16.5 | | pF |
| Thermal Resistance | Rth(j-a) | Mounted on a ceramic board (250mm²×0.8mm) | | 200 | | °C / W |

Marking : DD

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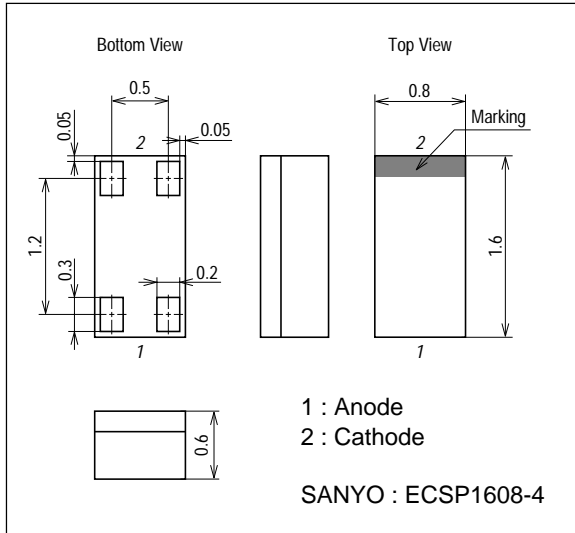
SANYO Electric Co., Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

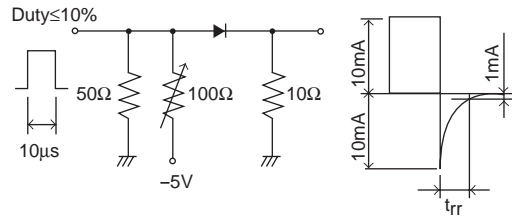
SB0503EJ

Package Dimensions

unit : mm
1332



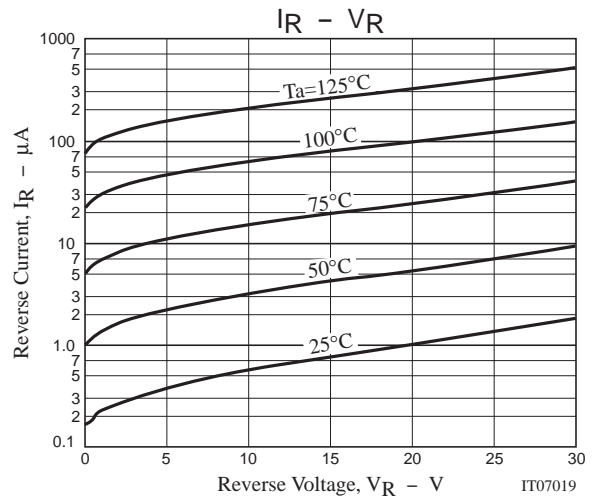
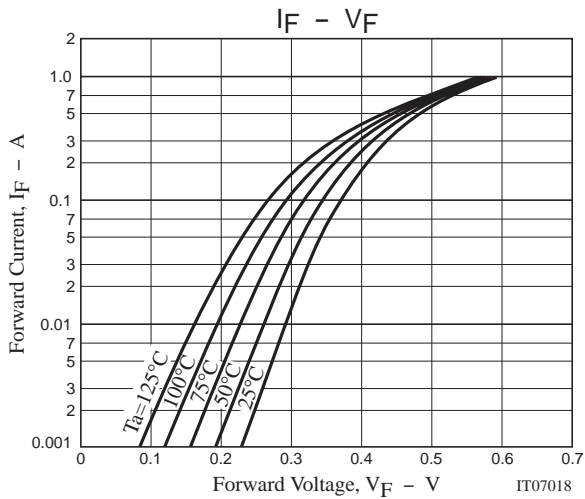
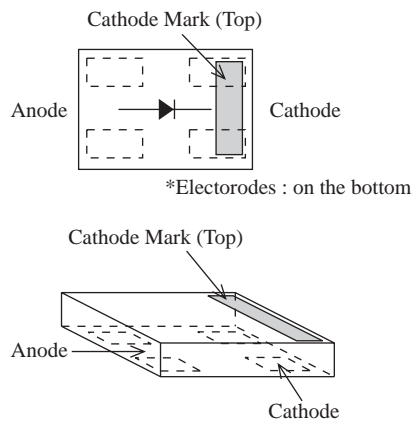
t_{rr} Test Circuit

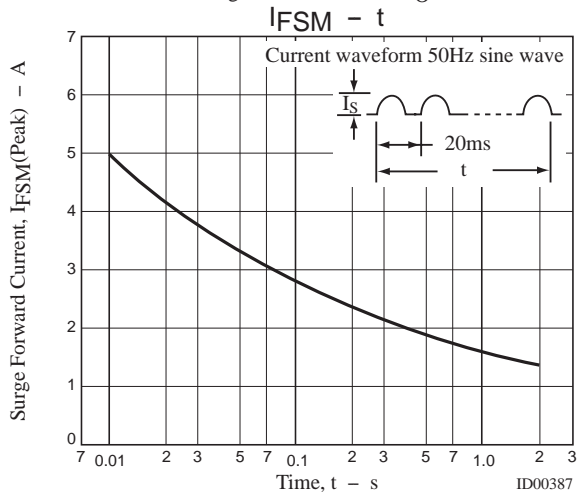
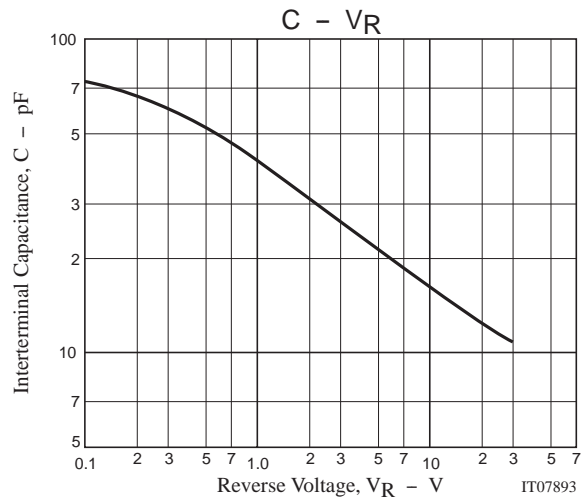
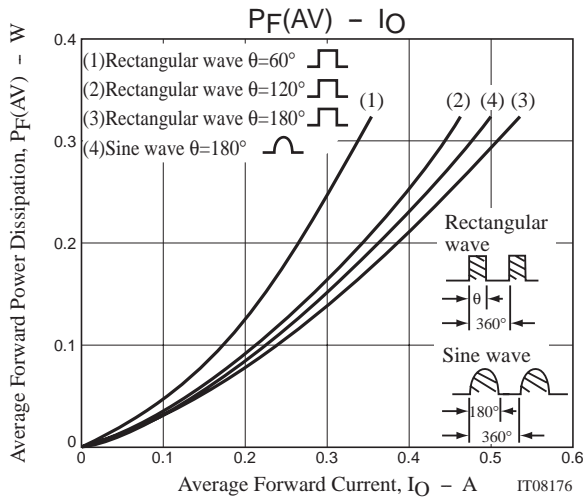


Type No. Indication (Top view)



Electrical Connection (Top view)





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