



SANYO Semiconductors

DATA SHEET

SS0503SH

 — Schottky Barrier Diode
30V, 0.5A Rectifier

Applications

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

Features

- Low forward voltage ($I_F=0.3A$, $V_F \text{ max}=0.42V$) ($I_F=0.5A$, $V_F \text{ max}=0.47V$).
- Ultrasmall package permitting applied sets to be small and slim.

Specifications

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|--|-----------|-------------------------|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 30 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V_{RSM} | | 30 | V |
| Average Output Current | I_O | | 0.5 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 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 | $I_R=0.5\text{mA}$ | 30 | | | V |
| Forward Voltage | V_{F1} | $I_F=0.3A$ | | 0.37 | 0.42 | V |
| | V_{F2} | $I_F=0.5A$ | | 0.42 | 0.47 | V |
| Reverse Current | I_R | $V_R=15V$ | | | 120 | μA |
| Interterminal Capacitance | C | $V_R=10V$, $f=1\text{MHz}$ | | 13 | | pF |
| Reverse Recovery Time | t_{rr} | $I_F=I_R=100\text{mA}$, See specified Test Circuit. | | | 10 | ns |

Marking : SB

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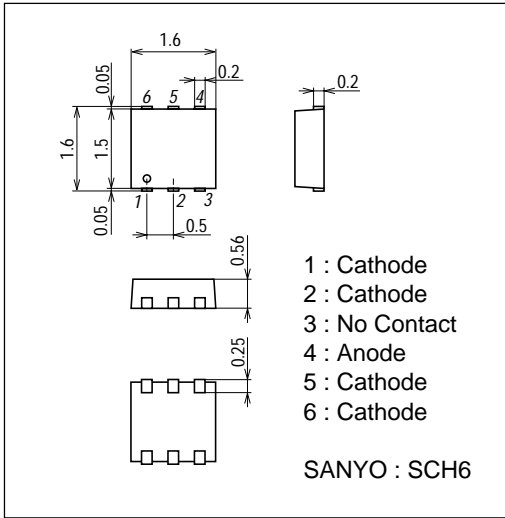
SANYO Electric Co., Ltd. Semiconductor Company

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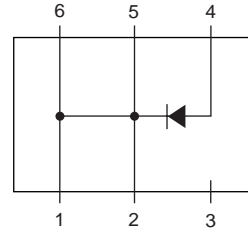
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Package Dimensions

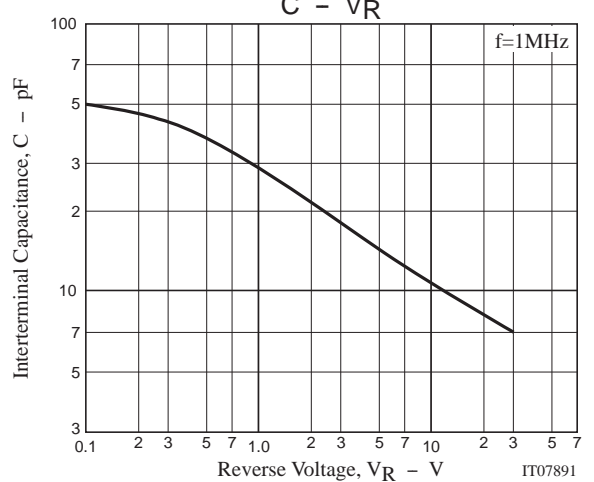
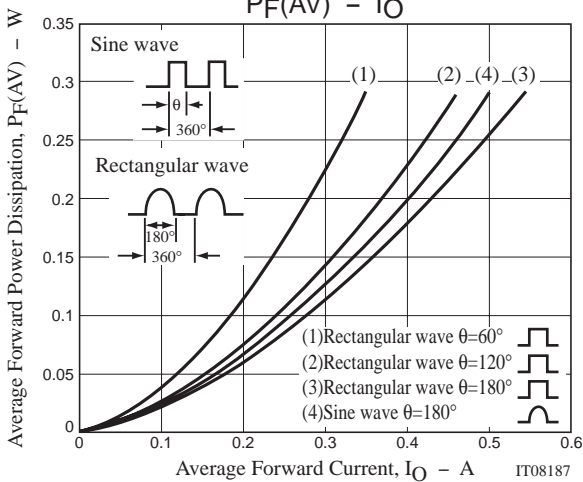
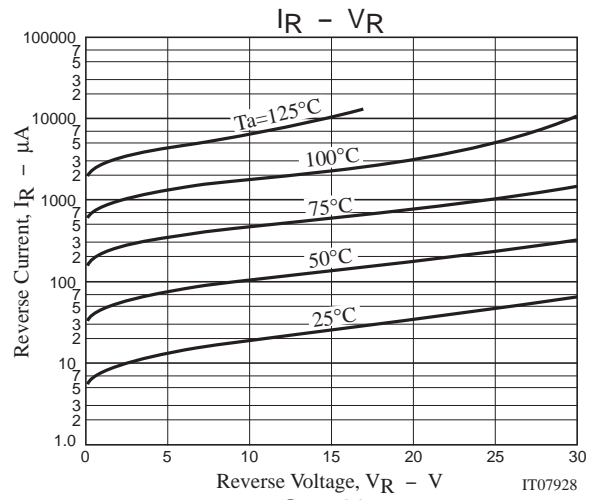
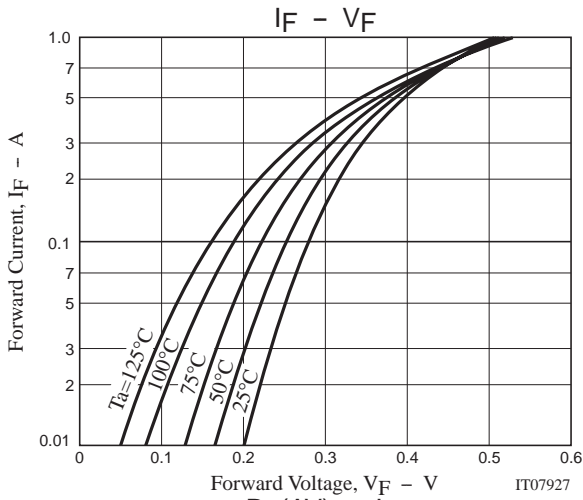
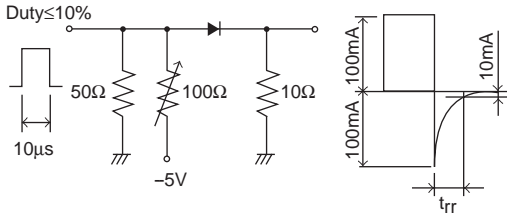
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1329A



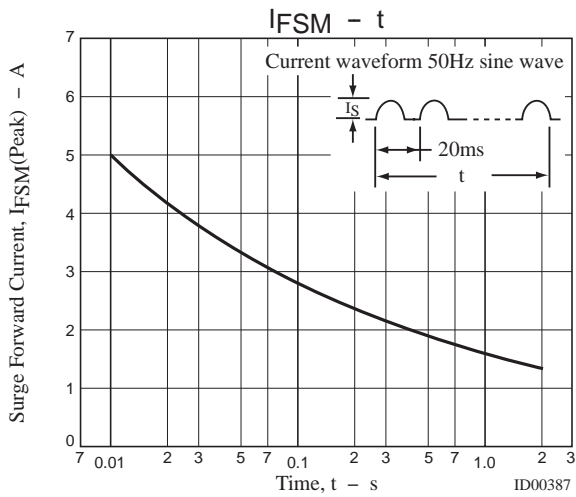
Electrical Connection(Top view)



t_{rr} Test Circuit



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