

SANYO Semiconductors DATA SHEET

SS0503SH — Schottky Barrier Diode 30V, 0.5A Rectifier

Applications

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

Features

- Low forward voltage (IF=0.3A, VF max=0.42V) (IF=0.5A, VF max=0.47V).
- · Ultrasmall package permitting applied sets to be small and slim.

Specifications

Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|--|--------|-------------------------|-------------|------|
| Repetitive Peak Reverse Voltage | VRRM | | 30 | ٧ |
| Nonrepetitive Peak Reverse Surge Voltage | VRSM | | 30 | V |
| Average Output Current | ΙO | | 0.5 | Α |
| Surge Forward Current | IFSM | 50Hz sine wave, 1 cycle | 5 | Α |
| Junction Temperature | Tj | | -55 to +125 | °C |
| Storage Temperature | Tstg | | -55 to +125 | °C |

Electrical Characteristics at Ta=25°C

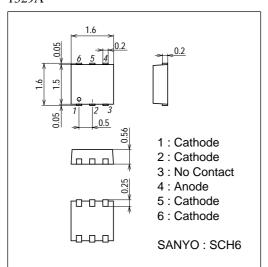
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|------------------|--|---------|------|------|--------|
| | | | min | typ | max | Offile |
| Reverse Voltage | VR | I _R =0.5mA | 30 | | | V |
| Forward Voltage | V _F 1 | I _F =0.3A | | 0.37 | 0.42 | V |
| | V _F 2 | I _F =0.5A | | 0.42 | 0.47 | V |
| Reverse Current | IR | V _R =15V | | | 120 | μΑ |
| Interterminal Capacitance | С | V _R =10V, f=1MHz | | 13 | | pF |
| Reverse Recovery Time | t _{rr} | I _F =I _R =100mA, See specified Test Circuit. | | | 10 | ns |

Marking : SB

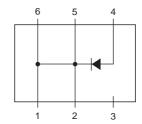
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Package Dimensions

unit : mm 1329A

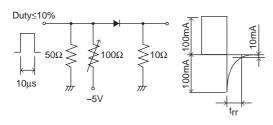


Electrical Connection(Top view) Sheet 4U.com

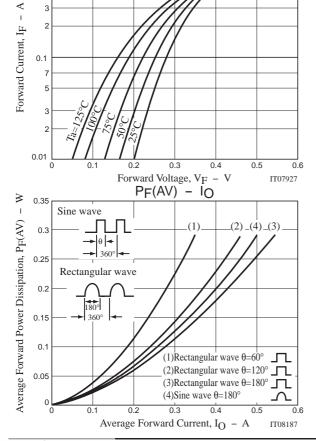


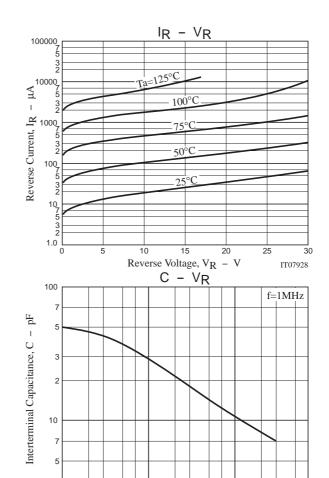
trr Test Circuit

1.0



IF - VF

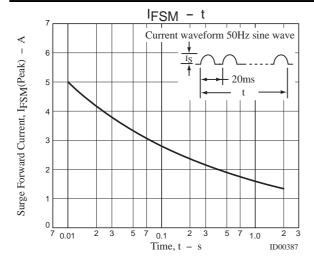




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Reverse Voltage, V_R - V

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