



# SBS001C

Schottky Barrier Diode

## 15V, 500mA Rectifier

### Applications

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

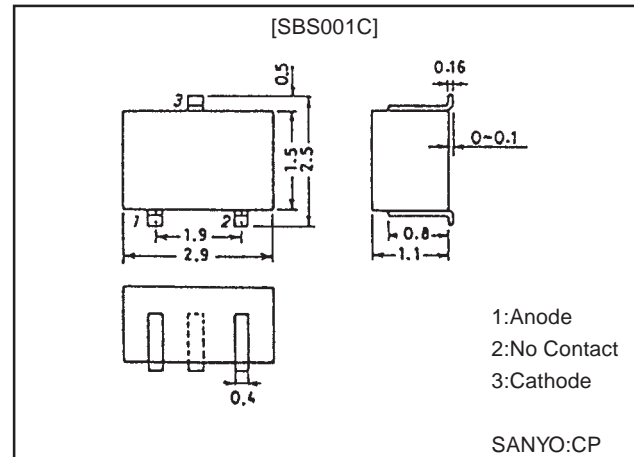
### Features

- Low forward voltage ( $V_F$  max=0.45V).
- Low leakage current and high reliability due to highly reliable planar structure.
- Small-sized package permitting SBS001C-applied sets to be compact and slim.

### Package Dimensions

unit:mm

1148A



### Specifications

#### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$ (Value per element)

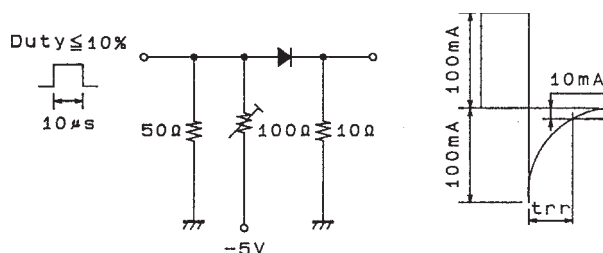
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		12	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		15	V
Average Output Current	$I_O$		500	mA
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	5	A
Junction Temperature	$T_j$		-55 to +125	$^\circ\text{C}$
Storage 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	$V_R$	$I_R=400\mu\text{A}$	12			V
Forward Voltage	$V_F$	$I_F=500\text{mA}$		0.4	0.45	V
Reverse Current	$I_R$	$V_R=6\text{V}$			200	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		45		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.		50		ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$			560		$^\circ\text{C/W}$

Marking:T

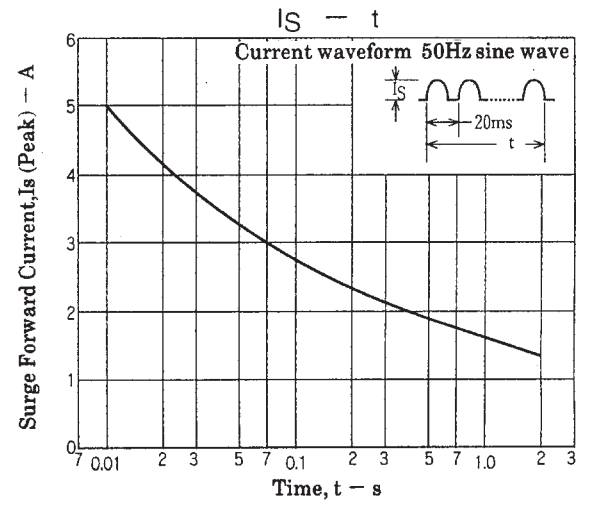
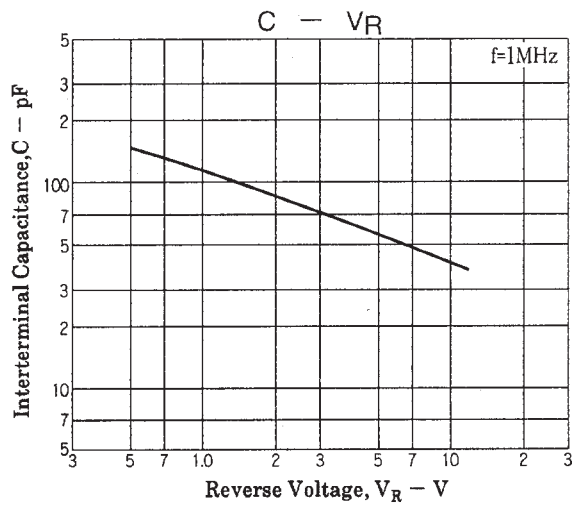
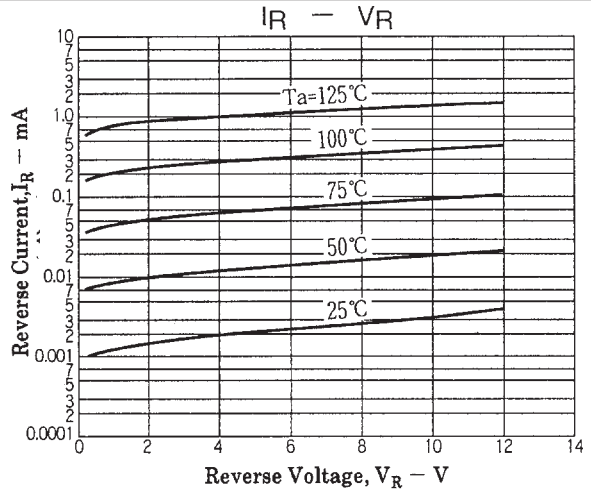
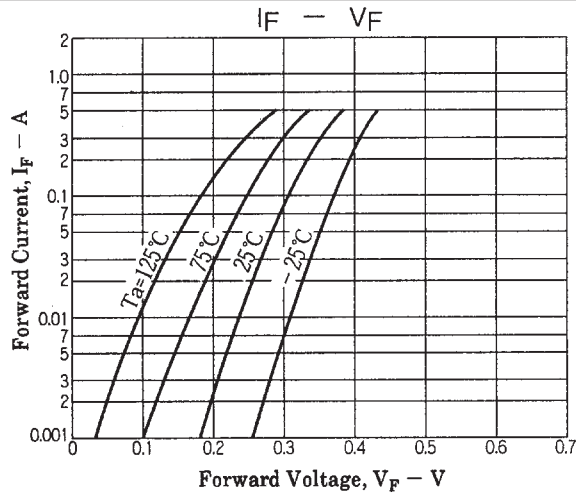
#### $T_{rr}$ Test Circuit



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