



# SB01W05C

Shottky Barrier Diode (Twin Type - Cathode Common)

## 50V, 100mA Rectifier

### Applications

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

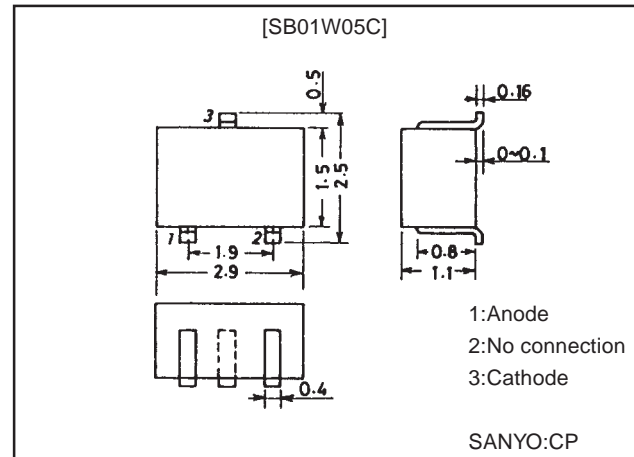
### Features

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

### Package Dimensions

unit:mm

1169A



### Specifications

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

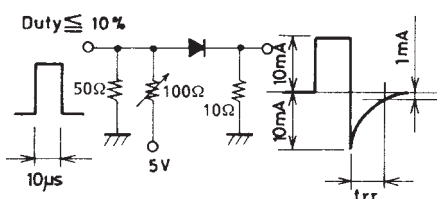
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		50	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		55	V
Average Output Current	$I_O$		100	mA
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1cycle	2	A
Junction Temperature	$T_J$		-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at  $T_a = 25^\circ\text{C}$  (Value per element)

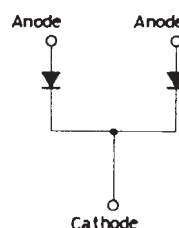
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=50\mu\text{A}$	50			V
Forward Voltage	$V_F$	$I_F=100\text{mA}$		0.55		V
Reverse Current	$I_R$	$V_R=25\text{V}$			15	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		4.4		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , See specified Test Circuit			10	ns
Thermal Resistance	Rthj-a(1)			560		$^\circ\text{C/W}$
	Rthj-a(2)	Mounted on Cu-foild area of $16\text{mm}^2 \times 0.2\text{mm}$ on glass epoxy board		410		$^\circ\text{C/W}$

· Marking:AH

### t<sub>rr</sub> Test Circuit



### Electrical Connection

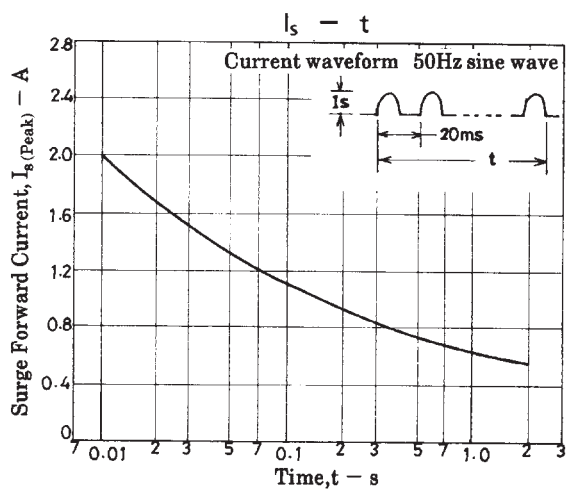
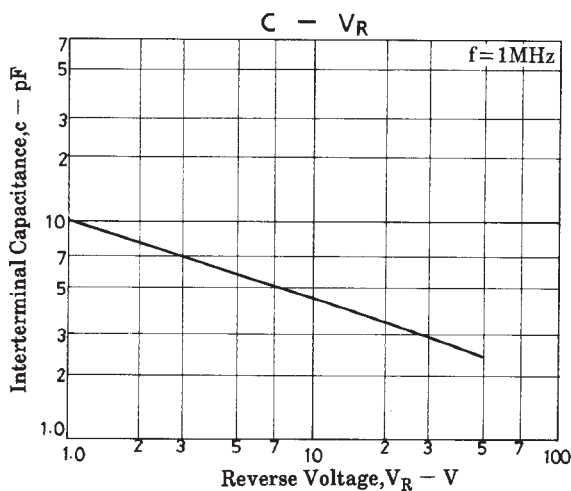
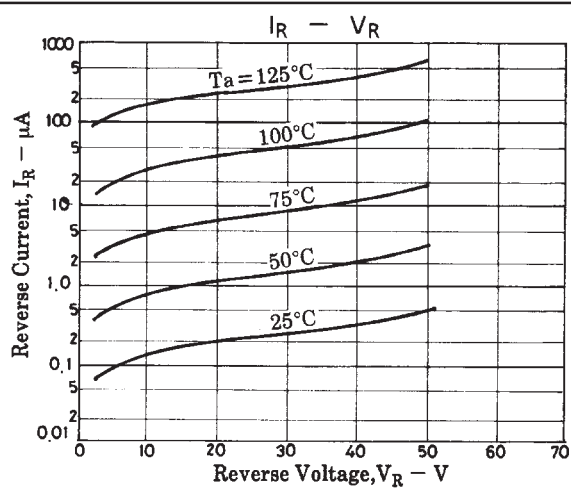
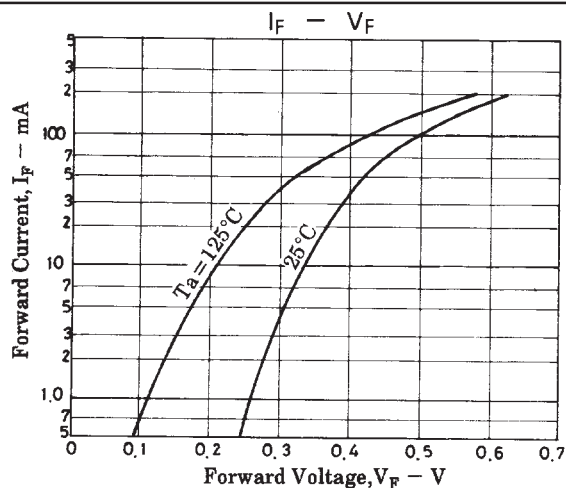


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