

# **SB05W05C**

Schottky Barrier Diode (Twin Type - Cathode Common)

# 50V, 500mA Rectifier

# **Applications**

- · Universal-use rectifier.
- · High frequency rectification (switching regulators, converters, choppers).

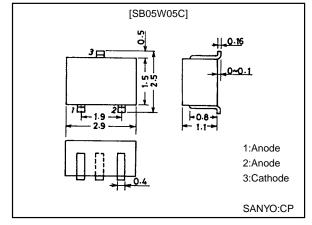
#### **Features**

- · Low forward voltage ( $V_F$  max=0.55V).
- · Fast reverse recovery time ( $t_{rr}$  max=10ns).
- · Low swicthing noise.
- · Low leakage current and high reliability due to highly reliable planar structure.
- · Small-sized package permitting applied sets to be compact and slim.

# **Package Dimensions**

unit:mm

1169A



# **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C (Value per element)

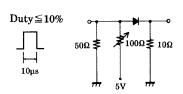
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		50	V
Non-repetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		55	V
Average Output Current	lo		500	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

#### **Electrical Characteristics at Ta = 25°C (Value per element)**

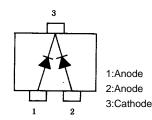
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	v <sub>R</sub>	I <sub>R</sub> =200μA	50			V
Forward Voltage	٧F	I <sub>F</sub> =500mA			0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25V			50	μA
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		24		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit			10	ns
Thermal Resistance	Rth(j-a)			420		°C/W

Marking: P

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



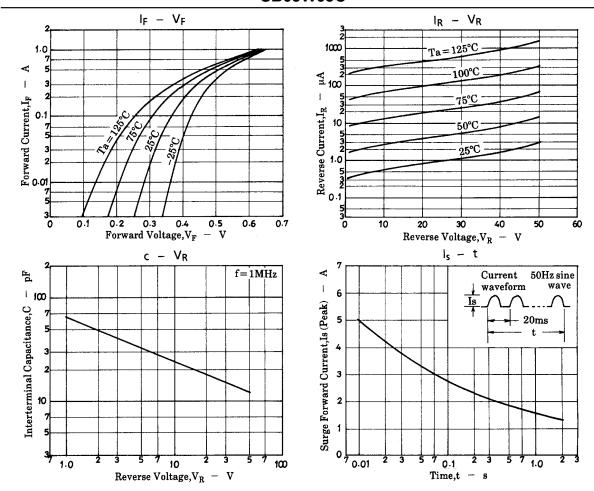
# 100MA trr



#### **Electrical Connection**

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#### **SB05W05C**



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