

## **SB05-05NP**

**Shottky Barrier Diode** 

# 50V, 500mA Rectifier

### **Applications**

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

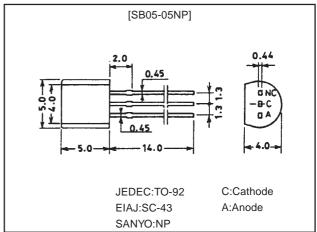
### **Features**

- · Low forward voltage ( $V_F$  max=0.55V).
- · Fast reverse recorvery time (trr max=10ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

### **Package Dimensions**

unit:mm

1157



### **Specifications**

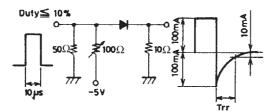
### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		-50	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		<del>-</del> 55	V
Average Output Current	Io	50Hz, resistive load, Ta=53°C	500	mA
Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, 1cycle	5	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

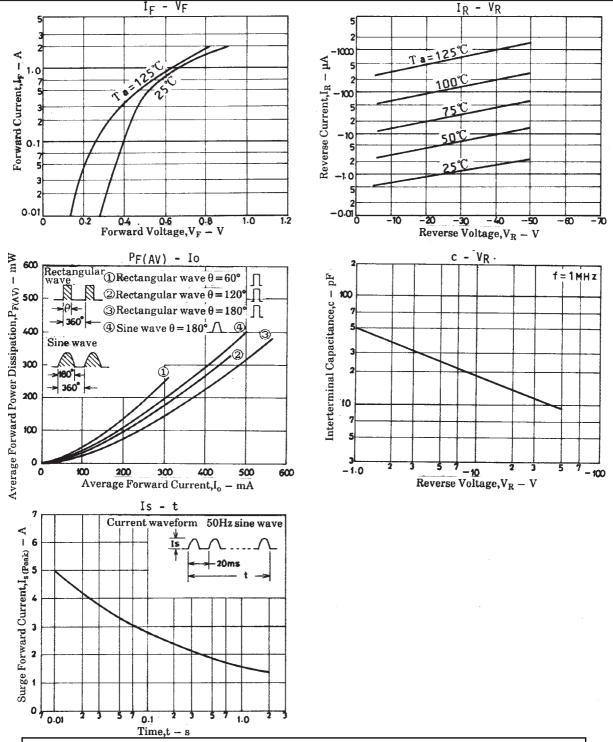
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧R	I <sub>R</sub> =-200μA	-50			V
Forward Voltage	٧ <sub>F</sub>	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		18		pF
Reverse Recorvery Time	trr	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit			10	ns
Thermal Resistance	Rthj-a			165		°C/W

#### trr Test Circuit



### **SB05-05NP**



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