

## SB005-09SPA

**Shottky Barrier Diode** 

# 90V, 50mA Rectifier

### **Applications**

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

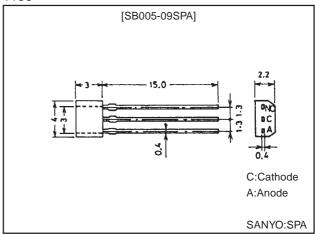
#### **Features**

- · Low forward voltage ( $V_F$  max=0.7V).
- · Fast reverse recovery time (trr=10ns max).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planner structure.

### **Package Dimensions**

unit:mm

1156



### **Specifications**

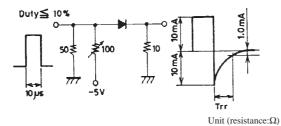
#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		-90	V
Non-repetitve Peak Reverse Surge Voltage	VRSM		-95	V
Average Output Current	10	50Hz, resistive load, Ta=102°C	50	mA
Surege Forward Current	IFSM	50Hz sine wave, 1 cycle	2	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

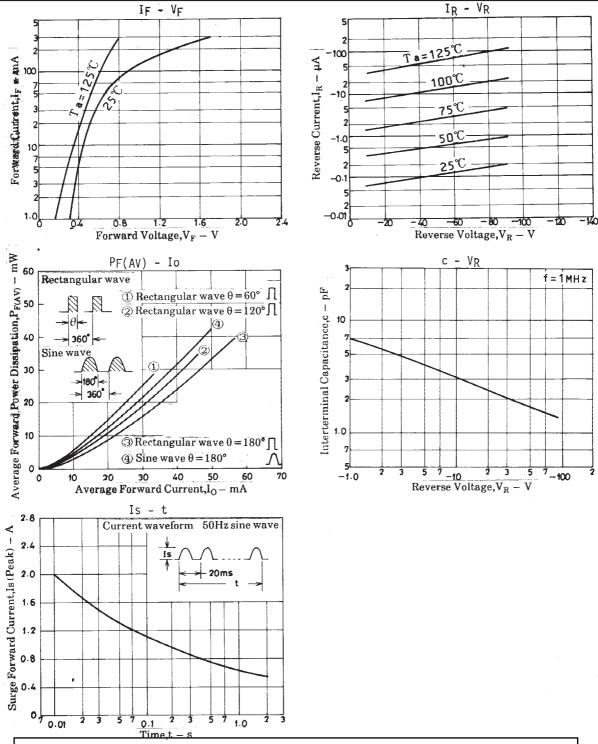
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	VR	I <sub>R</sub> =-50μA	-90			V
Forward Voltage	٧ <sub>F</sub>	I <sub>F</sub> =-50mA			0.7	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =-45V			-15	μA
Interterminal Capacitance	С	V <sub>R</sub> =-10V, f=1MHz		3.2		pF
Reverse Recovery Time	trr	I <sub>F</sub> =I <sub>R</sub> =100mA, Tj=25°C, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a			300		°C/W

#### trr Test Circuit



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