

SB100-09

Schottky Barrier Diode (Twin Type · Cathode Common)

# 90V, 10A Rectifier

## **Applications**

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

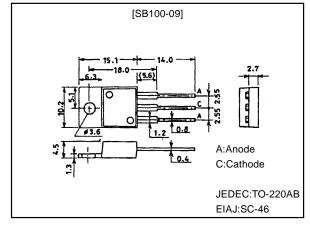
#### **Features**

- · Low forward voltage ( $V_F$  max=0.85V).
- · Fast reverse recovery time (trr max=45ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

## **Package Dimensions**

unit:mm

1159A



## **Specifications**

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

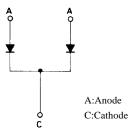
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		-90	V
Non-repetitve Peak Reverse Surge Voltage	V <sub>RSM</sub>		<del>-</del> 95	V
Average Output Current	Io	50Hz, resistive load, Tc=92°C	10	Α
Surege Forward Current	IFSM	50Hz sine wave, 1 cycle	80	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

### **Electrical Characteristics**

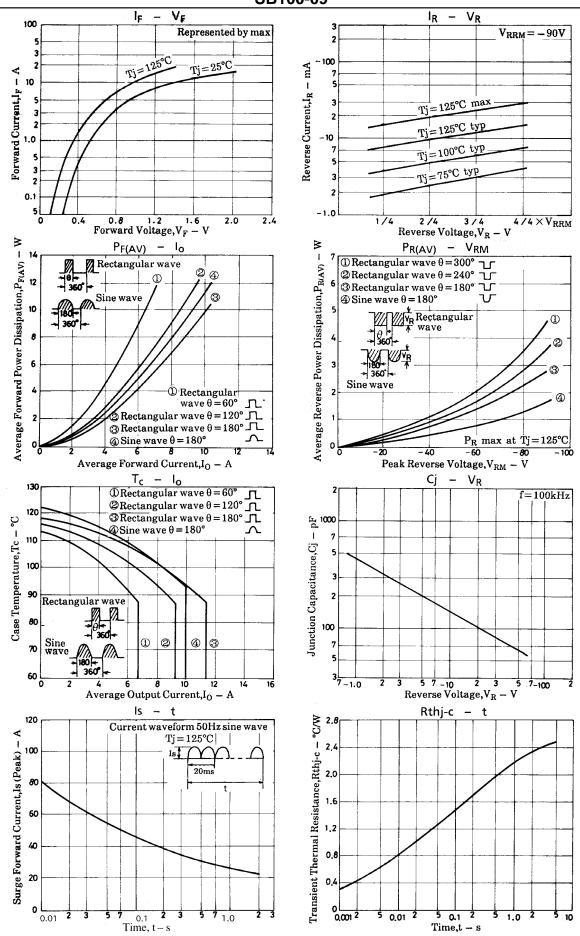
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧ <sub>R</sub>	I <sub>R</sub> =-2mA, Tj=25°C*	-90			V
Forward Voltage	٧F	I <sub>F</sub> =4A, Tj=25°C*			0.85	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =-45V, Tj=25°C*			-0.4	mA
Reverse Recovery Time	trr	I <sub>F</sub> =2A, Tj=25°C*, -dI <sub>F</sub> /dt=10A/μs			45	ns
Thermal Resistance	Rthj-c	Junction-Case:Smoothed DC			2.5	°C/W

Note)\*:Value per element

### **Electrical Connection**



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