

# SB200-09R

Schottky Barrier Diode (Twin Type - Cathode Common)

# 90V, 20A Rectifier

## Applications

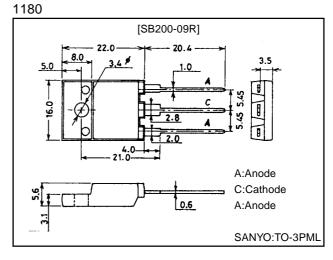
• High frequency rectification (switching regulators, converters, choppers).

### **Features**

- · Low forward voltage ( $V_F$  max=0.85V).
- $\cdot$  Fast reverse recovery time (trr max=55ns).
- · Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- · Micaless package facilitating easy mounting.

## **Package Dimensions**

unit:mm



## **Specifications**

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

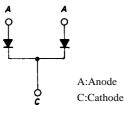
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		-90	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		-95	V
Average Output Current	IO	50Hz, resistive load, Tc=73°C	20	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	120	A
Junction Temperature	Тј		-55 to +125	°C
Storage Temperature	Tstg		–55 to +125	°C

#### **Electrical Characteristics**

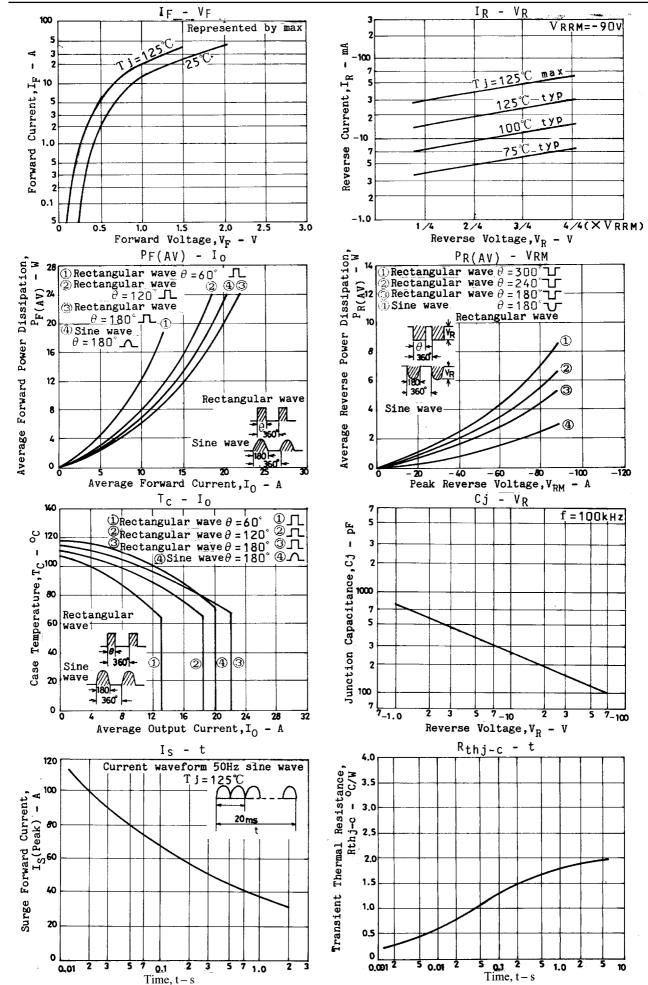
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Reverse Voltage	VR	I <sub>R</sub> =-4mA, Tj=25°C*	-90			V
Forward Voltage	VF	I <sub>F</sub> =8A, Tj=25°C*			0.85	V
Reverse Current	۱ <sub>R</sub>	V <sub>R</sub> =-45V, Tj=25°C*			-0.8	mA
Reverse Recovery Time	trr	I <sub>F</sub> =2A, Tj=25°C*, -dI <sub>F</sub> /dt=10A/µs			55	ns
Thermal Resistance	Rthj-c	Junction-Case:Smoothed DC			2	°C/W

Note)\*:Value per element

### **Electrical Connection**



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