

## SB100-09K

Schottky Barrier Diode (Twin Type - Cathode Common)

# 90V, 10A Rectifier

## **Applications**

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

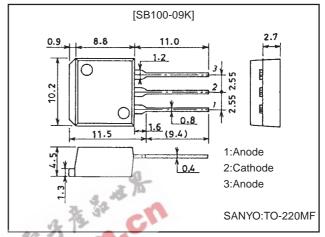
#### **Features**

- · 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

1199C



## **Specifications**

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

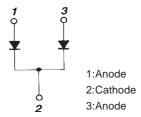
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		90	V
Nonrepetitive Peak Reverse Surge Voltage	<sup>V</sup> RSM		95	V
Average Output Current	10	50Hz, resistive load, Tc=92°C	10	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	80	Α
Junction Temperature	Tj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

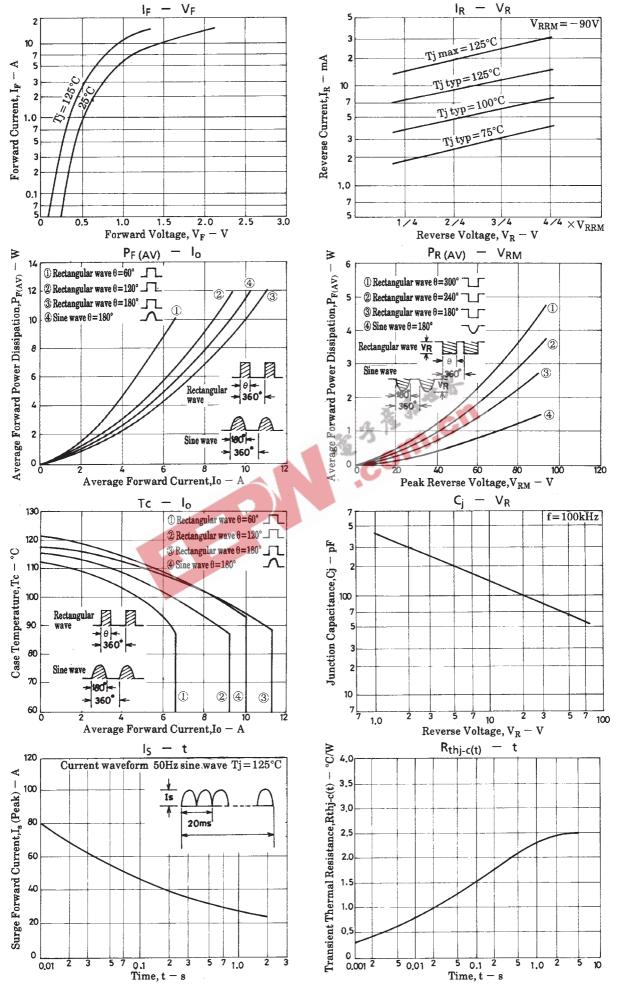
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧ <sub>R</sub>	I <sub>R</sub> =2mA, Tj=25°C, *	90			V
Forward Voltage	٧ <sub>F</sub>	I <sub>F</sub> =4A, Tj=25°C, *			0.85	V
Reverse Current	IR	V <sub>R</sub> =45V, Tj=25°C, *			0.4	mA
Reverse Recovery Time	trr	I <sub>F</sub> =2mA, 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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