

## **SB10-18K**

Schottky Barrier Diode (Twin Type - Cathode Common)

# 180V, 1A Rectifier

### **Applications**

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

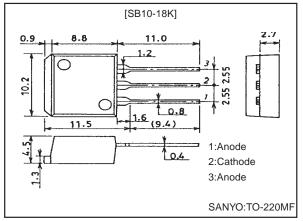
#### **Features**

- · Low forward voltage ( $V_F=0.85V$  max).
- · Fast reverse recovery time (trr=35ns max).
- · 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

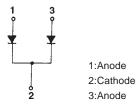
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		180	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		190	V
Average Output Current	lo	50Hz, resistive load, Tc=112°C	1	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	30	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

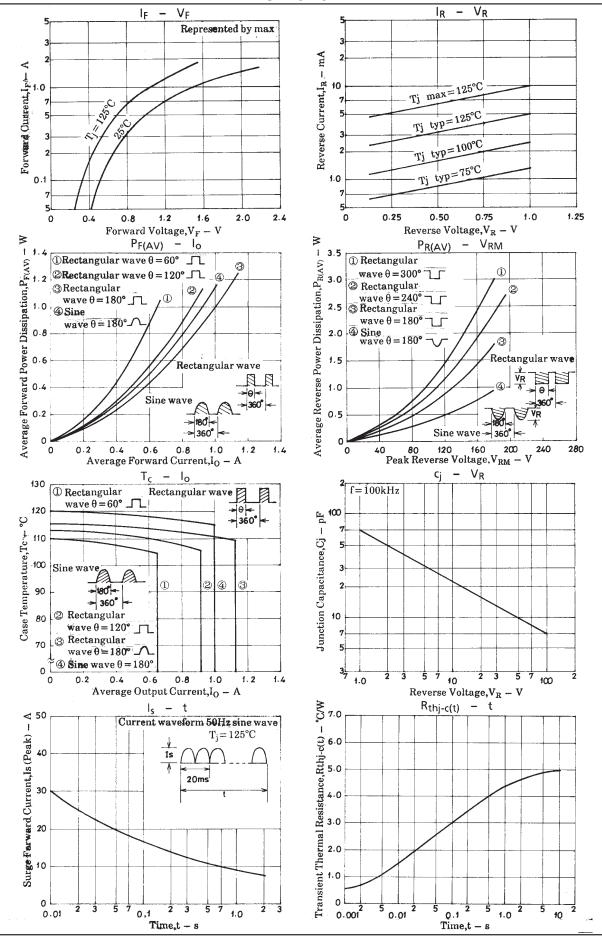
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> =0.5mA, Tj=25°C,*	180			V
Forward Voltage	٧F	I <sub>F</sub> =0.4A, Tj=25°C,*			0.85	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =90V, Tj=25°C,*			0.1	mA
Reverse Recovery Time	trr	I <sub>F</sub> =2A, Tj=25°C,*,-dI <sub>F</sub> /dt=10A/μs			35	ns
Thermal Resistance	Rthj-c	Junction-Case:Smoothed DC			5.0	°C/W

Note \*: Value per element

### **Electrical Connection**





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