



# SB10-18K

Schottky Barrier Diode (Twin Type · Cathode Common)

## 180V, 1A Rectifier

### Applications

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

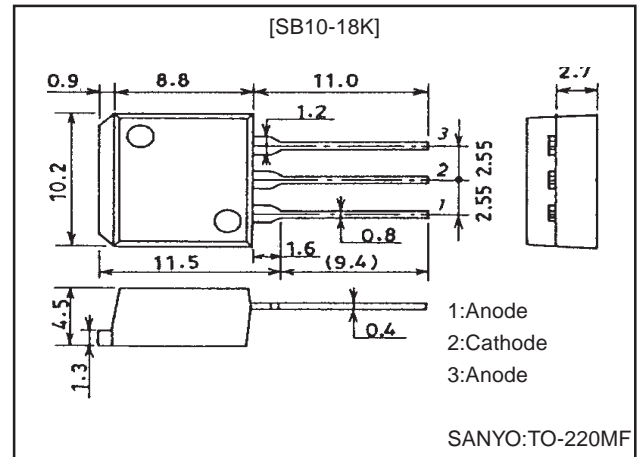
### Features

- Low forward voltage ( $V_F=0.85V$  max).
- Fast reverse recovery time ( $t_{rr}=35ns$  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 $T_a = 25^\circ C$

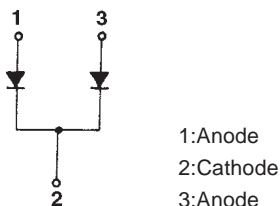
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		180	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		190	V
Average Output Current	$I_O$	50Hz, resistive load, $T_c=112^\circ C$	1	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	30	A
Junction Temperature	$T_j$		-55 to +125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

#### Electrical Characteristics at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=0.5mA$ , $T_j=25^\circ C$ ,*	180			V
Forward Voltage	$V_F$	$I_F=0.4A$ , $T_j=25^\circ C$ ,*			0.85	V
Reverse Current	$I_R$	$V_R=90V$ , $T_j=25^\circ C$ ,*			0.1	mA
Reverse Recovery Time	$t_{rr}$	$I_F=2A$ , $T_j=25^\circ C$ ,*, $-dI_F/dt=10A/\mu s$			35	ns
Thermal Resistance	$R_{thj-c}$	Junction-Case:Smoothed DC			5.0	$^\circ C/W$

Note \*: Value per element

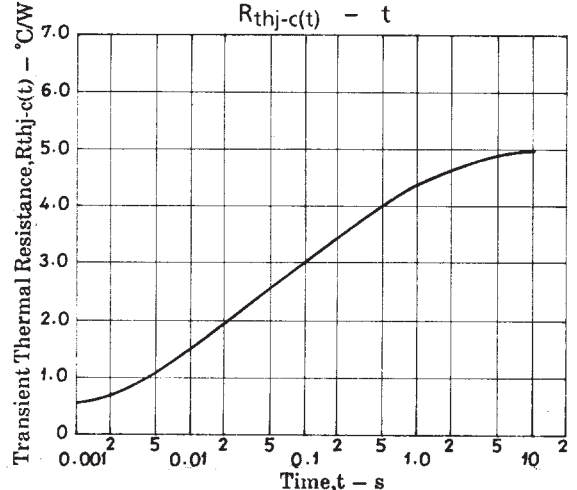
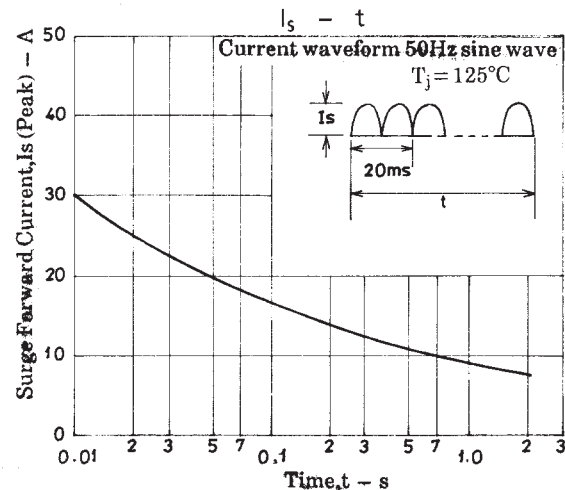
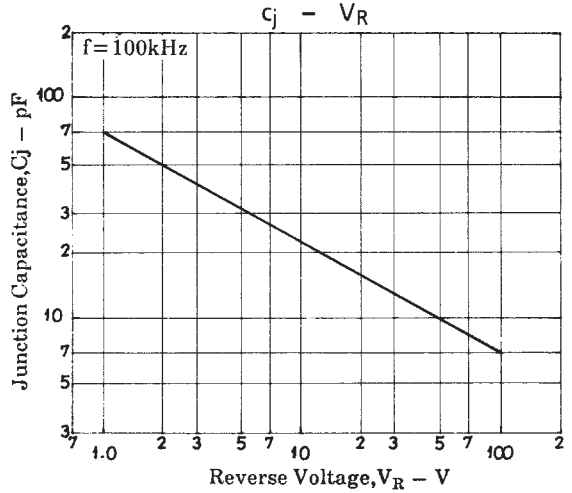
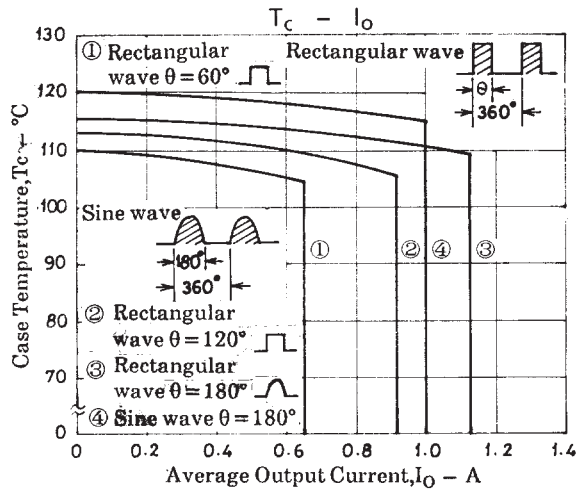
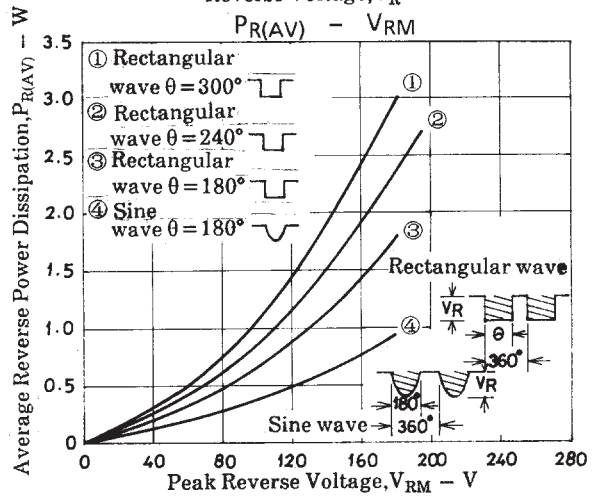
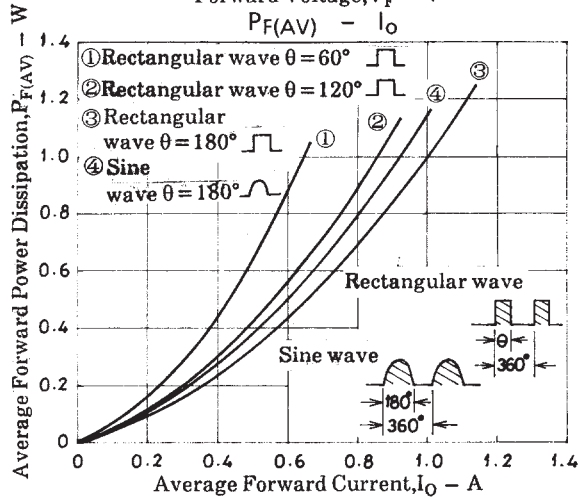
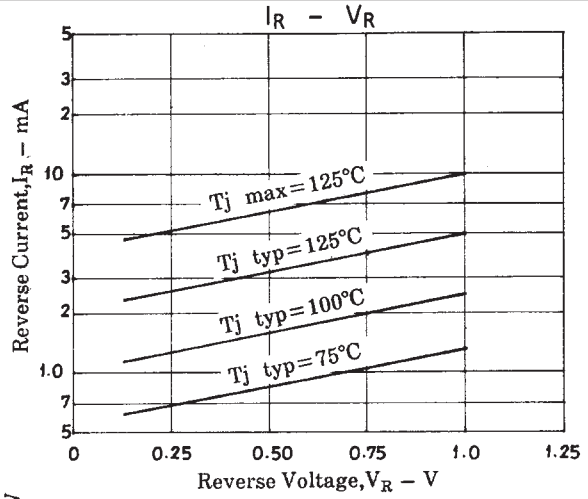
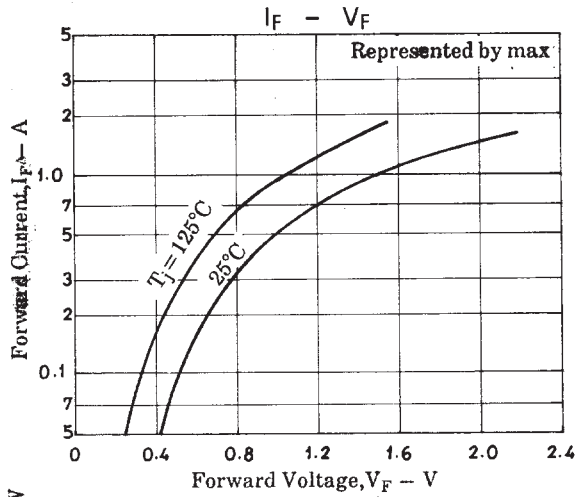
#### Electrical Connection



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