



SB250-09R

Schottky Barrier Diode (Twin Type · Cathode Common)

90V, 25A Rectifier

Applications

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

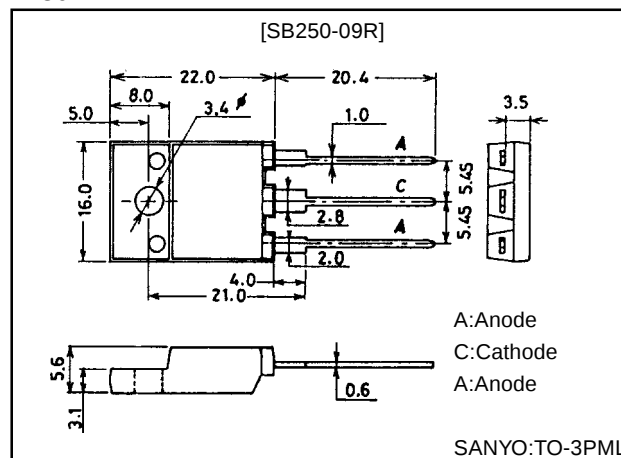
Features

- Low forward voltage ($V_F \text{ max}=0.85\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=60\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Micaless package facilitating easy mounting.

Package Dimensions

unit:mm

1180



Specifications

Absolute Maximum Ratings at Ta = 25°C

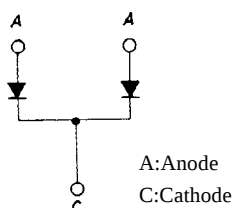
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		–90	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		–95	V
Average Output Current	I_O	50Hz, resistive load, $T_c=67^{\circ}\text{C}$	25	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	160	A
Junction Temperature	T_j		–55 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		–55 to +125	$^{\circ}\text{C}$

Electrical Characteristics

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R = -5\text{mA}$, $T_J = 25^\circ\text{C}^*$	-90			V
Forward Voltage	V_F	$I_F = 10\text{A}$, $T_J = 25^\circ\text{C}^*$			0.85	V
Reverse Current	I_R	$V_R = -45\text{V}$, $T_J = 25^\circ\text{C}^*$			-1.0	mA
Reverse Recovery Time	t_{rr}	$I_F = 2\text{A}$, $T_J = 25^\circ\text{C}^*$, $-dI_F/dt = 10\text{A}/\mu\text{s}$			60	ns
Thermal Resistance	R_{thj-c}	Junction-Case:Smoothed DC			1.8	$^\circ\text{C}/\text{W}$

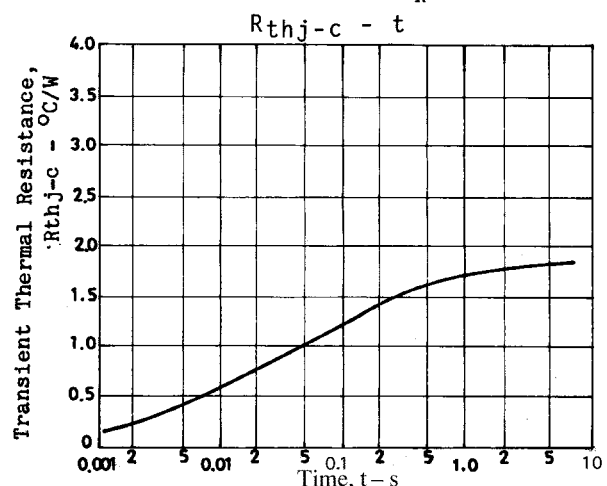
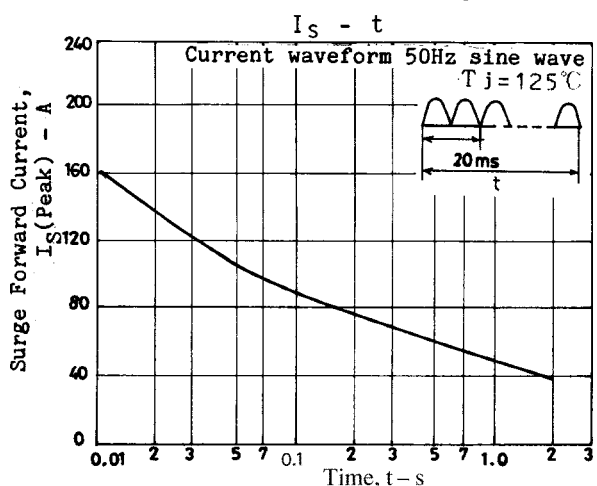
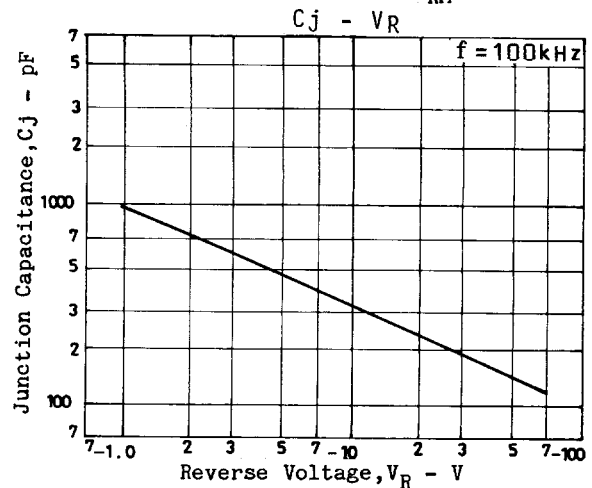
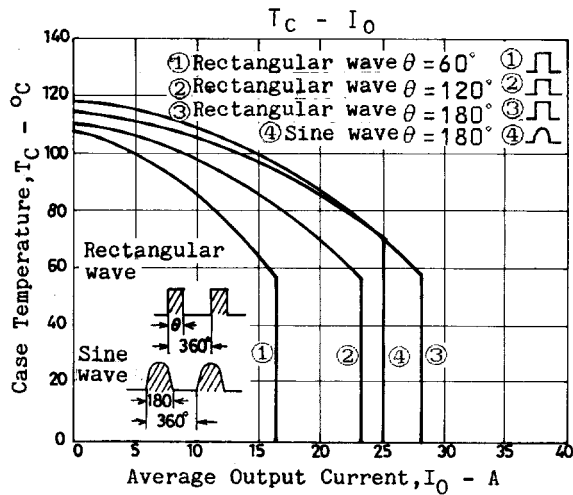
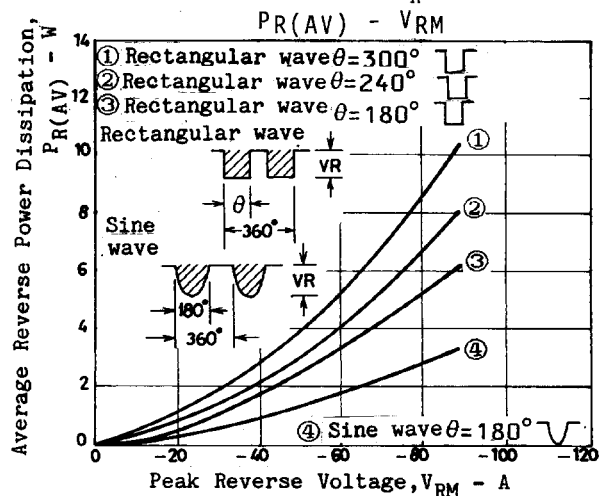
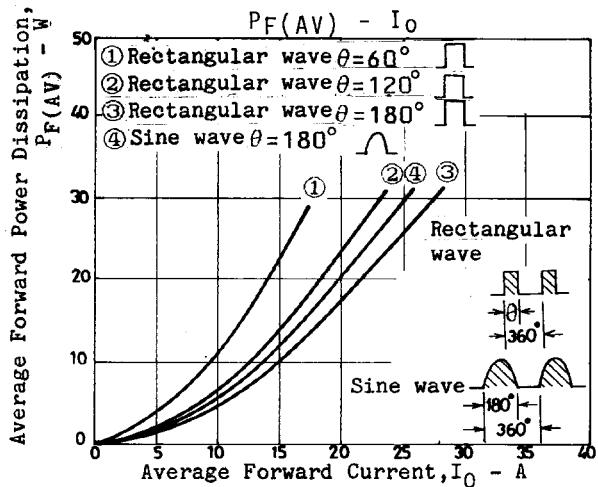
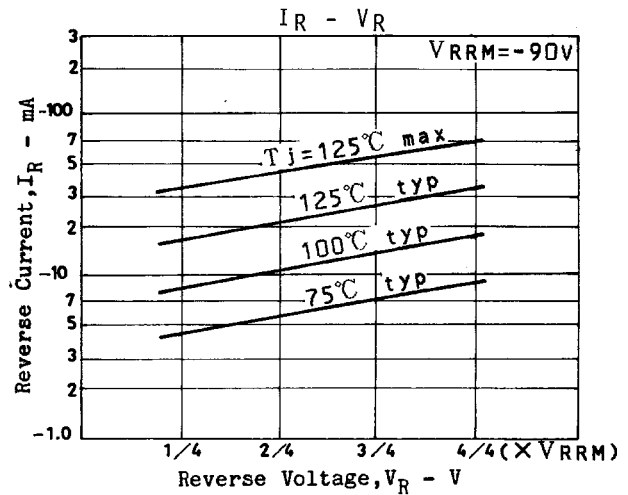
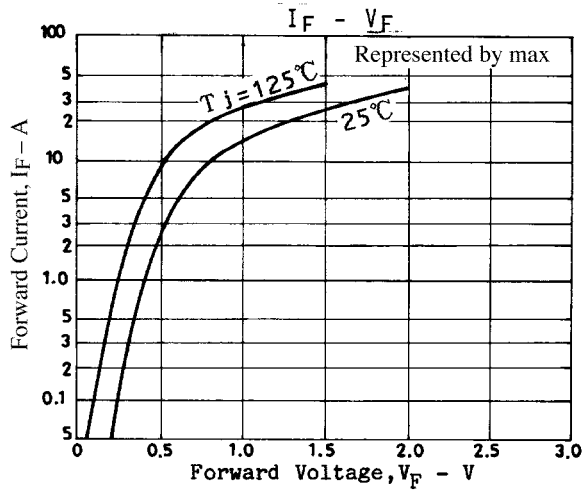
Note)*:Value per element

Electrical Connection



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