

**SB20W05Z**

Schottky Barrier Diode (Twin Type - Cathode Common)

50V, 2A Rectifier

Applications

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

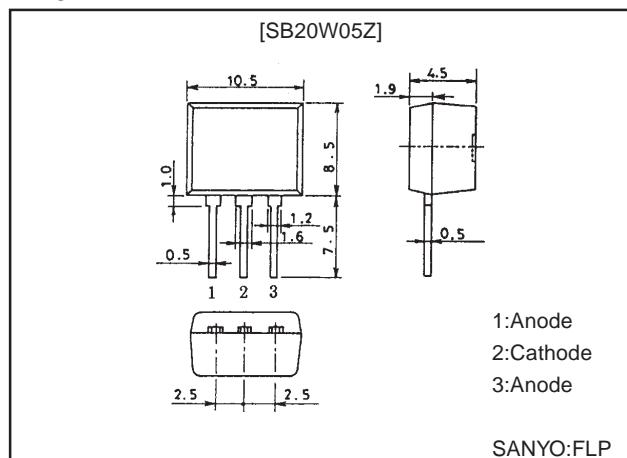
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (trr max=20ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1243A



Specifications

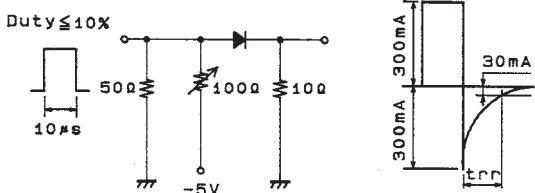
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		50	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		55	V
Average Output Current	I_O		2	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	20	A
Junction Temperature	T_j		-55 to +125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

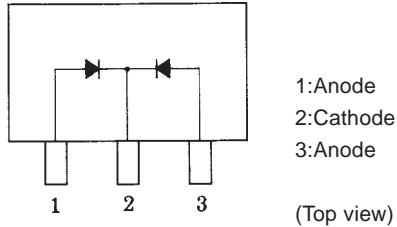
Electrical Characteristics at $T_a = 25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$	50			V
Forward Voltage	V_F	$I_F=2\text{A}$		0.55		V
Reverse Current	I_R	$V_R=25\text{V}$		200		μA
Intertermal Capacitance	C	$V_R=10\text{V}, f=1\text{MHz}$		120		pF
Reverse Recovery Time	trr	$I_F=I_R=300\text{mA}$, See specifaied Test Circuit.		20		ns
Thermal Resistance	$R_{th(j-a)}$			70		°C/W

trr Test Circuit



Electrical Connection



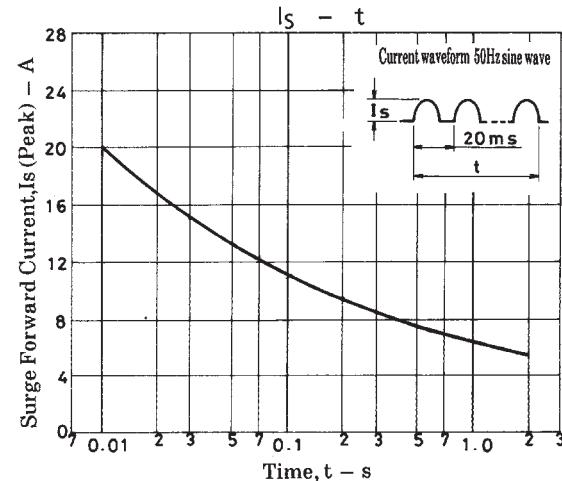
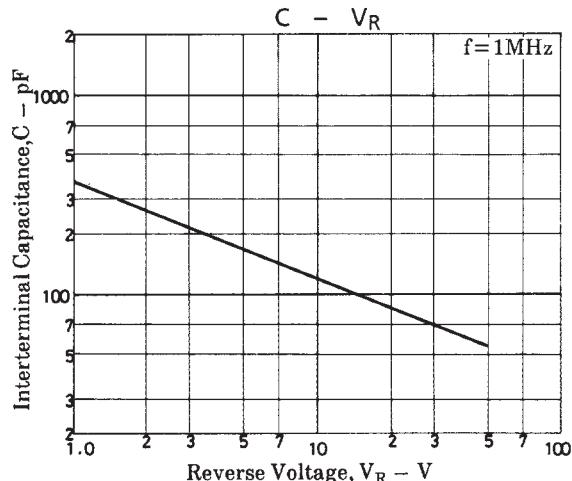
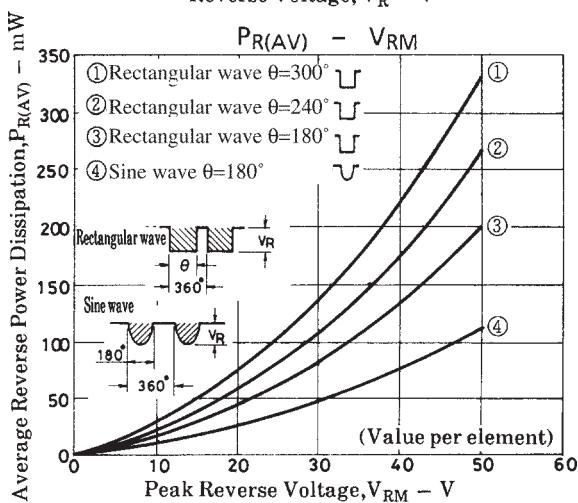
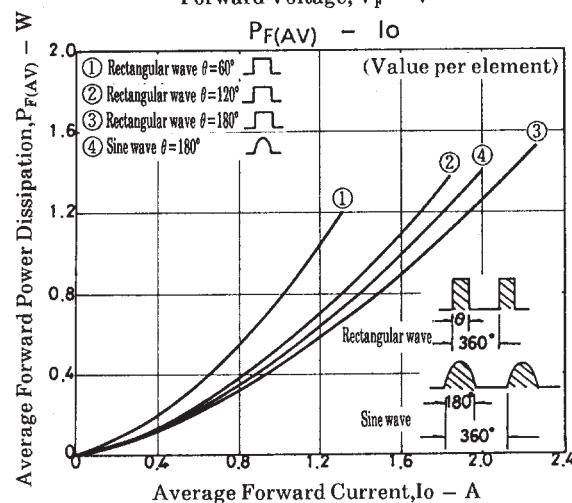
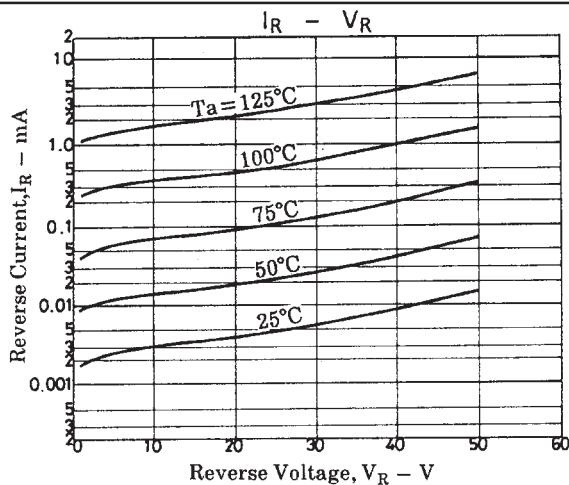
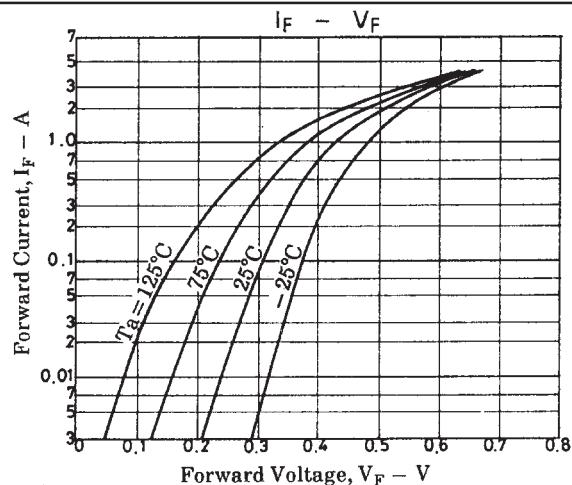
1:Anode
2:Cathode
3:Anode

(Top view)

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