



SB10W05V

Schottky Barrier Diode (Twin Type · Cathode Common)

50V, 1A Rectifier

Applications

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

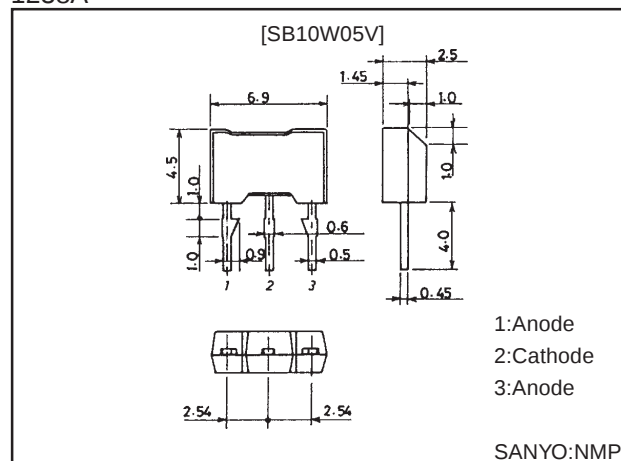
Features

- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=10\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1238A



Specifications

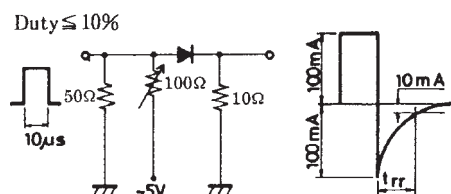
Absolute Maximum Ratings at Ta = 25°C (Value per element)

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		1	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	10	A
Junction Temperature	T_J		−55 to +125	°C
Storage Temperature	T_{stg}		−55 to +125	°C

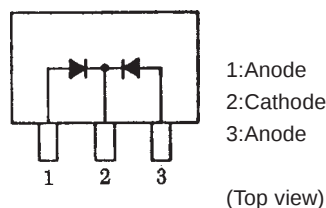
Electrical Characteristics at Ta = 25°C (Value per element)

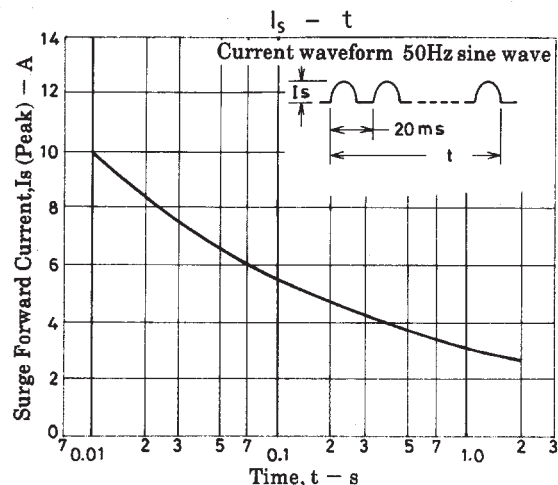
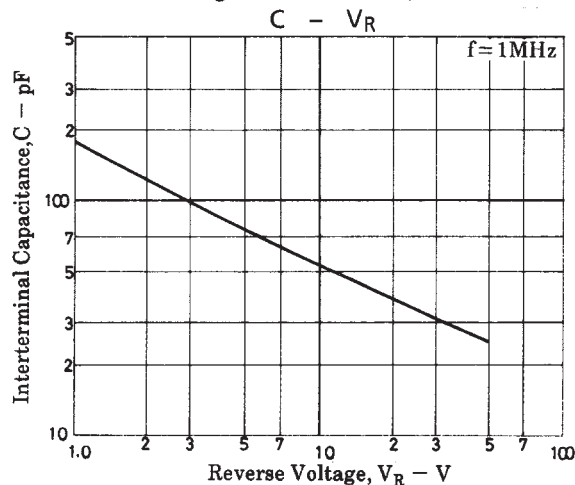
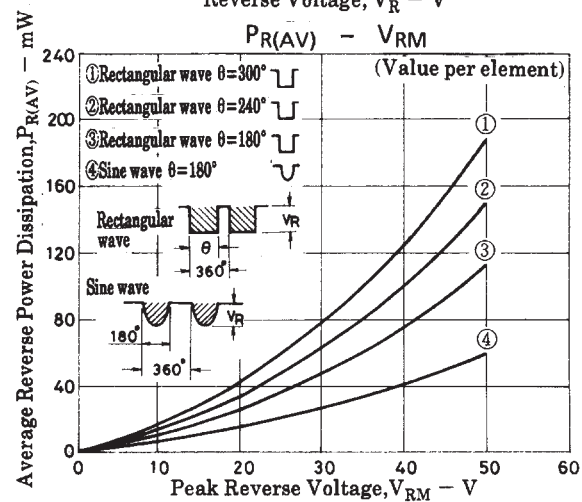
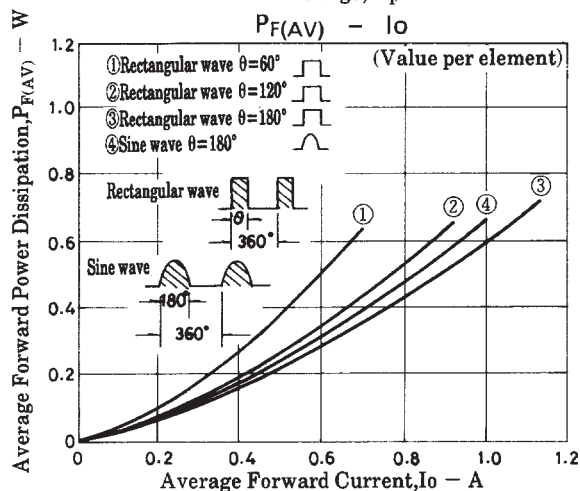
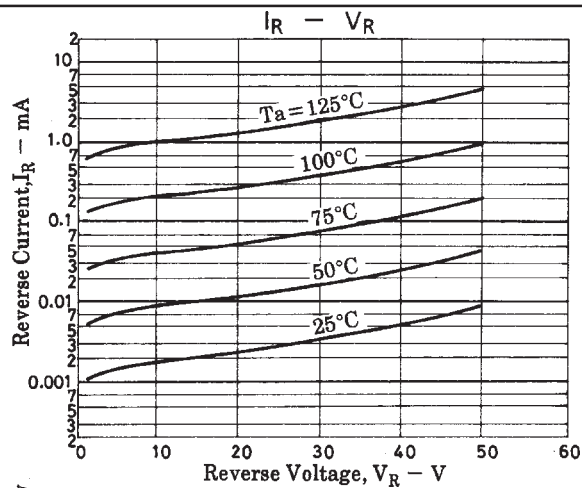
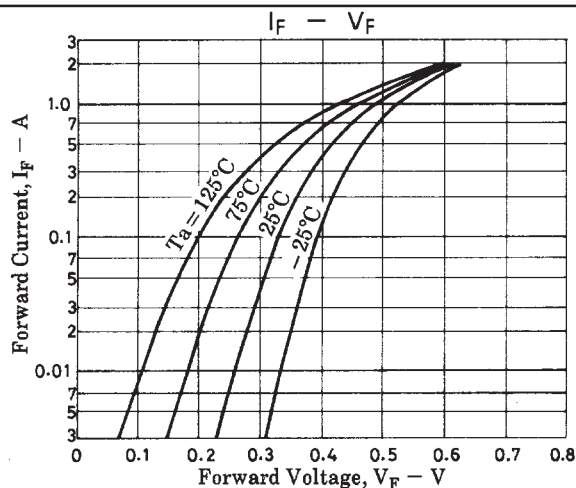
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu A$	50			V
Forward Voltage	V_F	$I_F=1A$			0.55	V
Reverse Current	I_R	$V_R=25V$			80	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		52		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$			110		$^{\circ}C/W$

trr Test Circuit



Electrical Connection





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