

Schottky Barrier Diode (Twin Type · Cathode Common)



SB10W05Z

50V, 1A Rectifier

Applications

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

Features

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

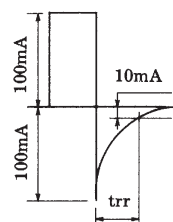
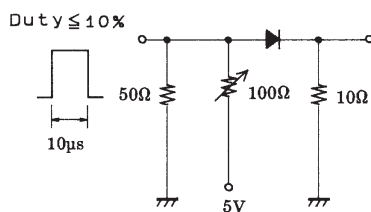
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$ (Value per element)

			unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	V
Nonrepetitive Peak Reverse	V_{RSM}	55	V
Surge Voltage			
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	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

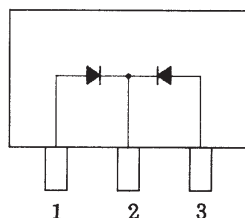
Electrical Characteristics at $T_a=25^\circ\text{C}$ (Value per element)

			min	typ	max	unit
Reverse Voltage	V_R	$I_R=300\mu\text{A}$	50			V
Forward Voltage	V_F	$I_F=1\text{A}$			0.55	V
Reverse Current	I_R	$V_R=25\text{V}$			80	μA
Interterminal Capacitance	c	$V_R=10\text{V}$, $f=1\text{MHz}$		52		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$			10	ns
		See specified Test Circuit.				
Thermal Resistance	R_{thj-a}			75		$^\circ\text{C/W}$

t_{rr} Test Circuit



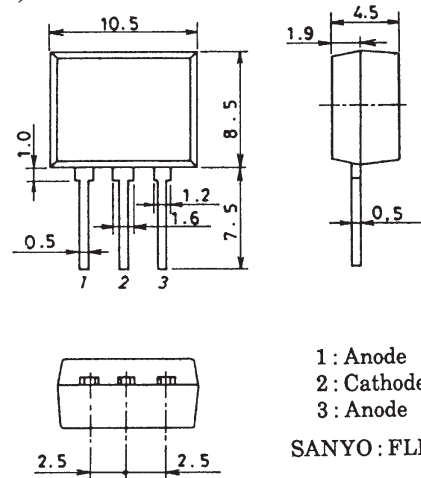
Electrical Connection



1 : Anode
2 : Cathode
3 : Anode

Package Dimensions 1243A

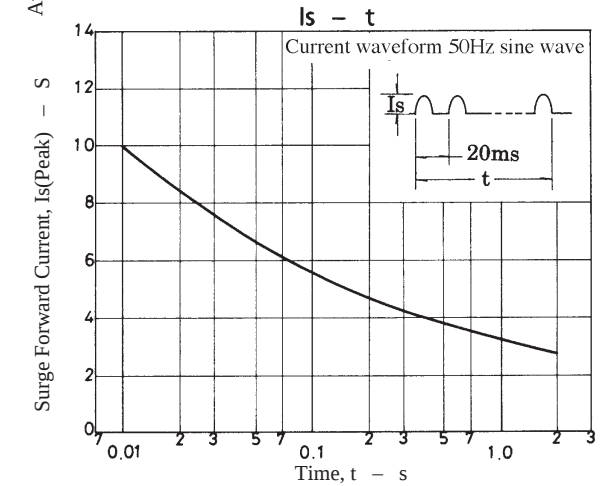
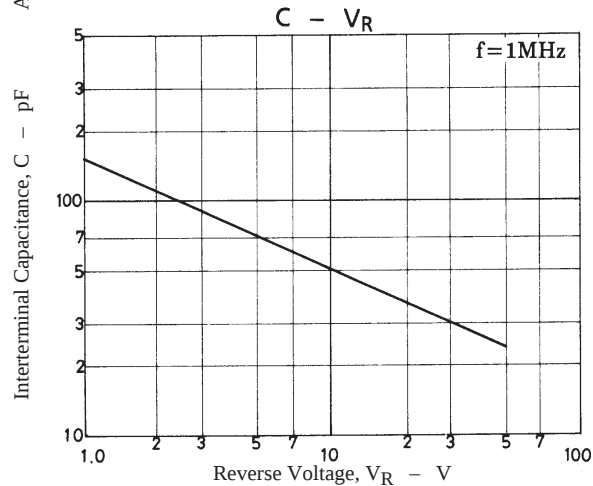
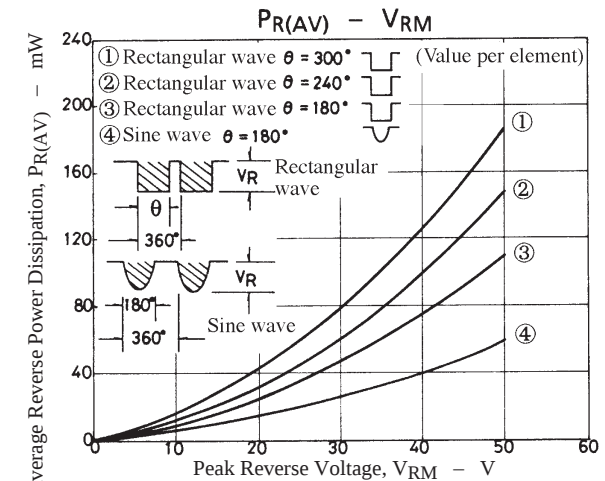
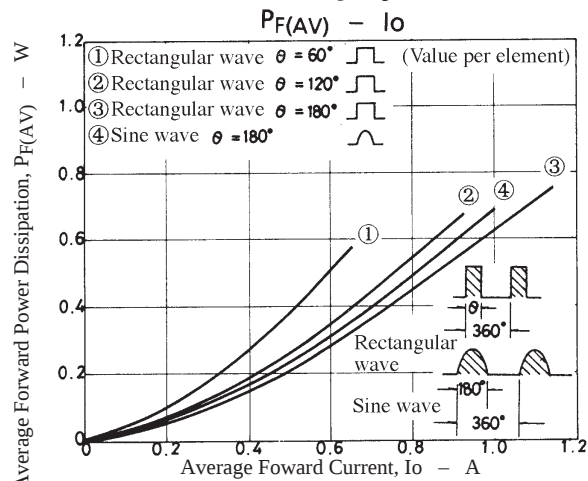
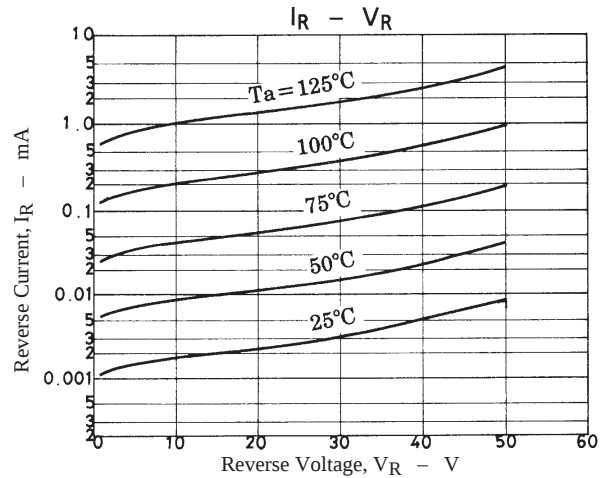
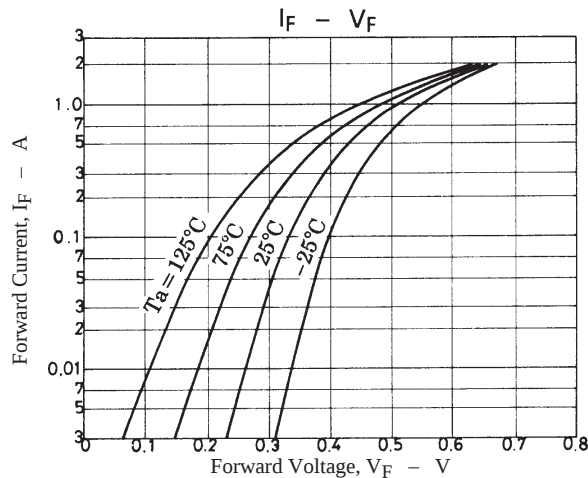
(unit : mm)



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