Schottky Barrier Diode (Twin Type · Cathode Common)



# SB10W05Z

# 50V, 1A Rectifier

## **Applications**

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

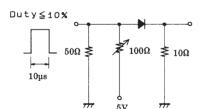
#### **Features**

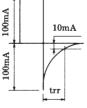
- Low forward voltage (V<sub>F</sub> max=0.55V).
- Fast reverse recovery time (t<sub>rr</sub> max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Absolute Maximum Ratings		unit		
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		50	V
Nonrepetitive Peak Reverse	V <sub>RSM</sub>		55	V
Surge Voltage				
Average Output Current	Io		1	А
Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, 1 cycle	10	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

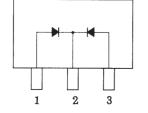
Electrical Characteristics at Ta=25°C (Value per element)			min	typ	max	unit
Reverse Voltage	VR	$I_R=300\mu A$	50			V
Forward Voltage	V <sub>F</sub>	IF=1A			0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25V			80	μA
Interterminal Capacitance	с	V <sub>R</sub> =10V, f=1MHz		52		pF
Reverse Recovery Time	t <sub>rr</sub>	IF=IR=100mA			10	ns
		See specified Test Circuit.				
Thermal Resistance	Rthj-a			75		°C/W

# trr Test Circuit





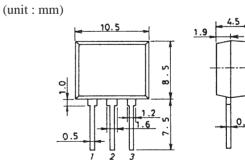
### **Electrical Connection**

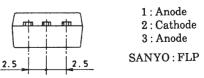




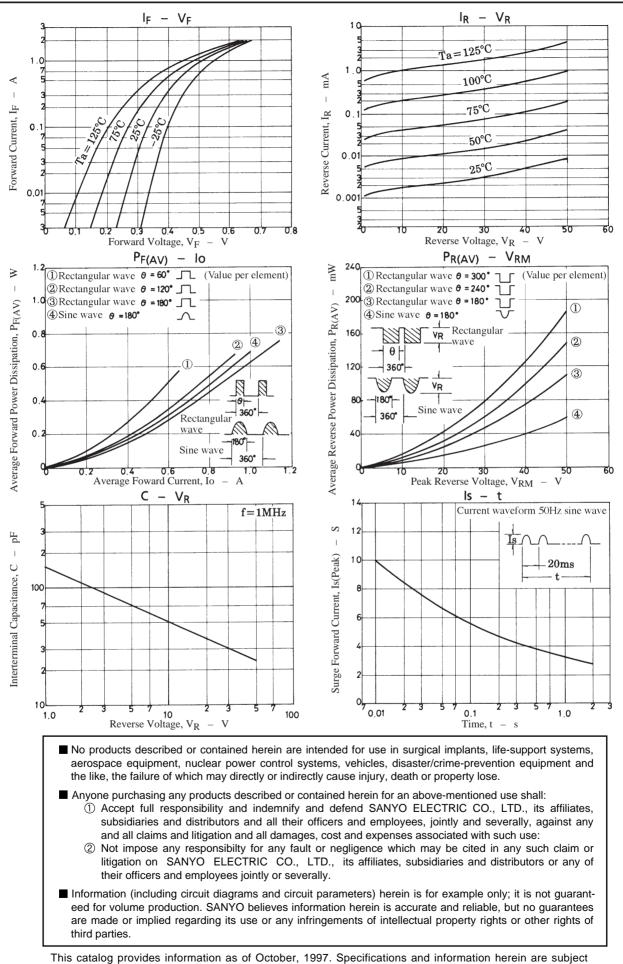
1 : Anode 2 : Cathode 3 : Anode

#### Package Dimensions 1243A





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to change without notice.