

Ordering number:EN1920A



SB10-05

Schottky Barrier Diode

50V, 1A Rectifier

Applications

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

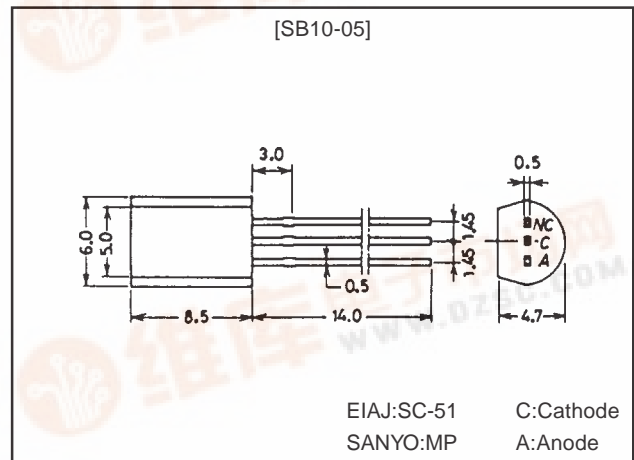
Features

- 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

1158



Specifications

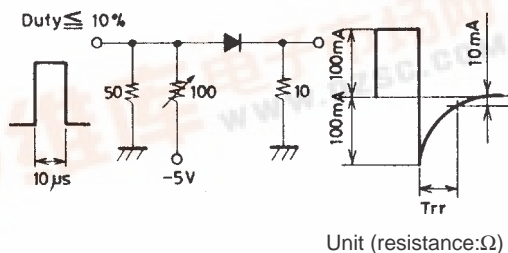
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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	50Hz, resistive load. $T_a=26^\circ\text{C}$	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	$^\circ\text{C}$

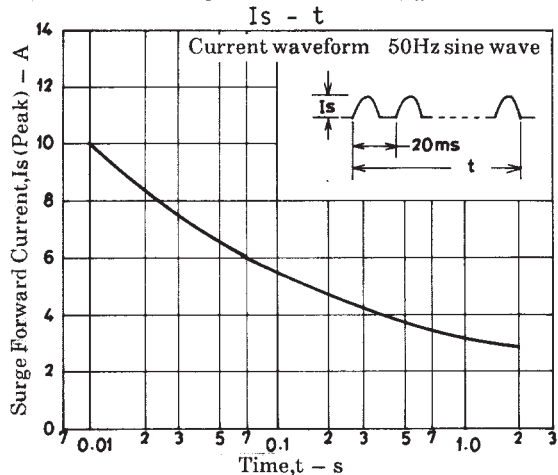
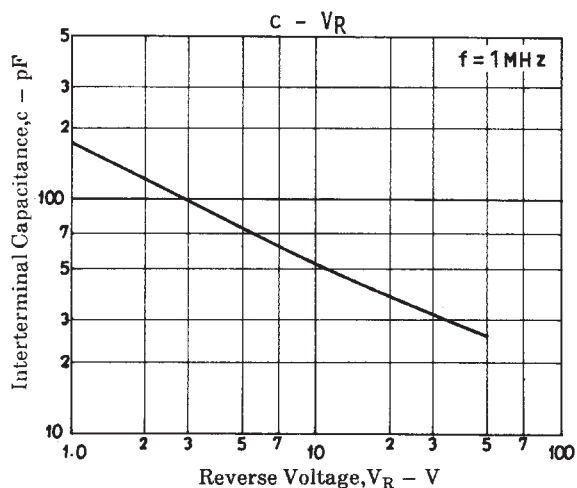
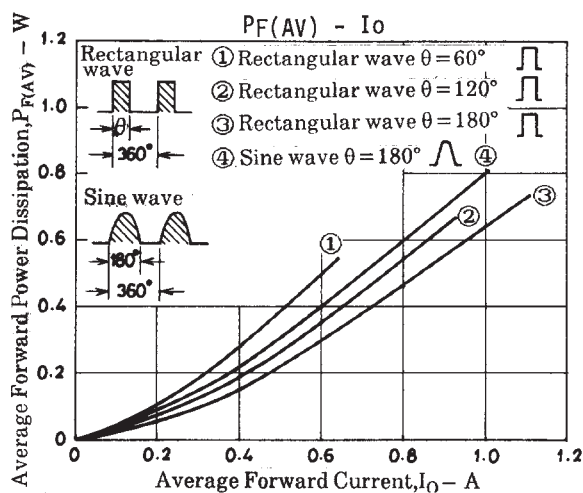
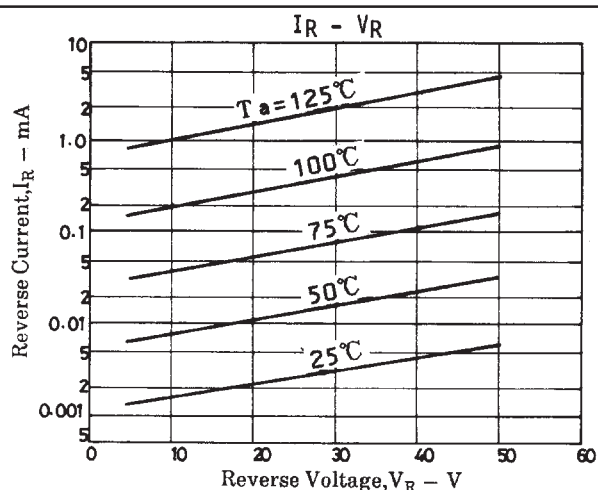
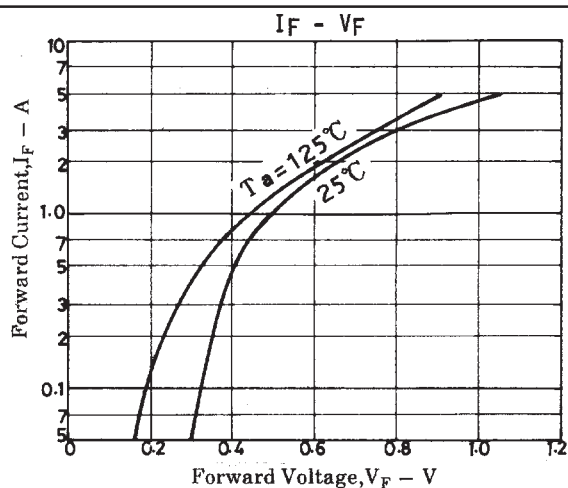
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	R_{th-a}			110		$^\circ\text{C/W}$

t_{rr} Test Circuit



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