



SB20-03E

Schottky Barrier Diode

30V, 2A Rectifier

Applications

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

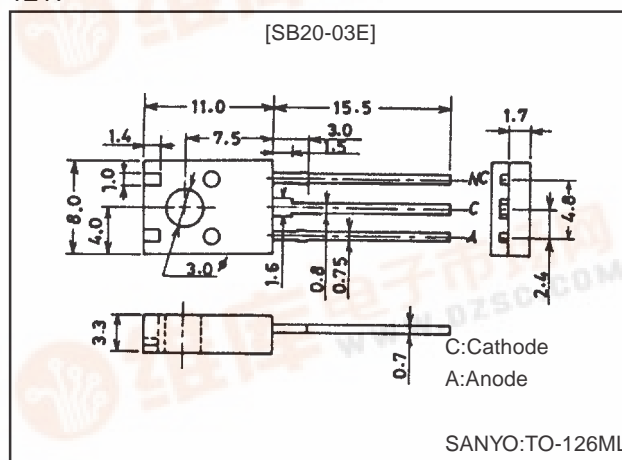
Features

- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=20\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1217



Specifications

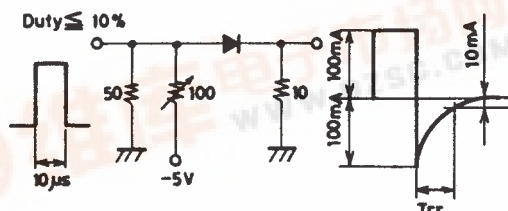
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O	50Hz, resistive load, $T_a=113^{\circ}\text{C}$	2	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	20	A
Junction Temperature	T_J		-55 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^{\circ}\text{C}$

Electrical Characteristics at Ta = 25°C

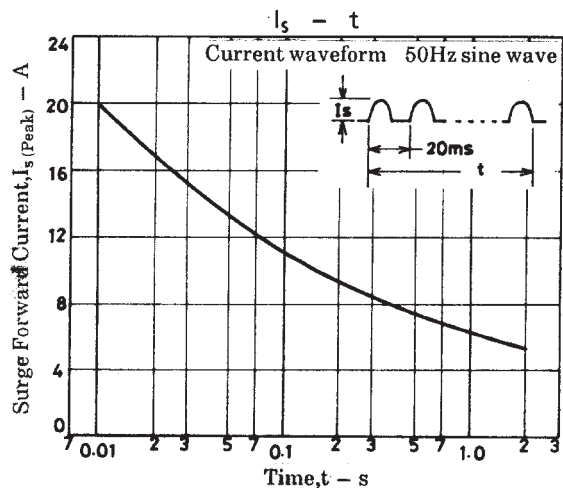
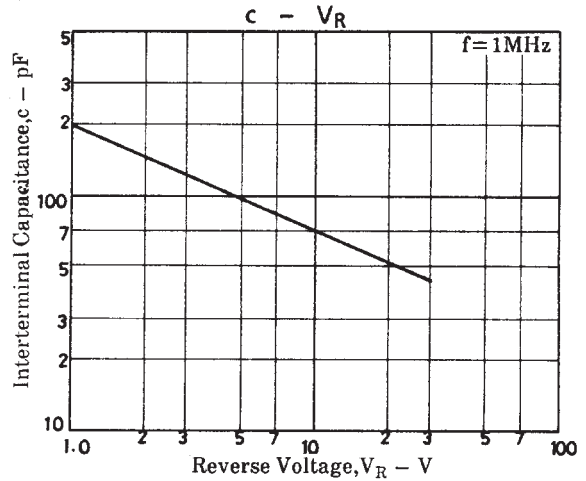
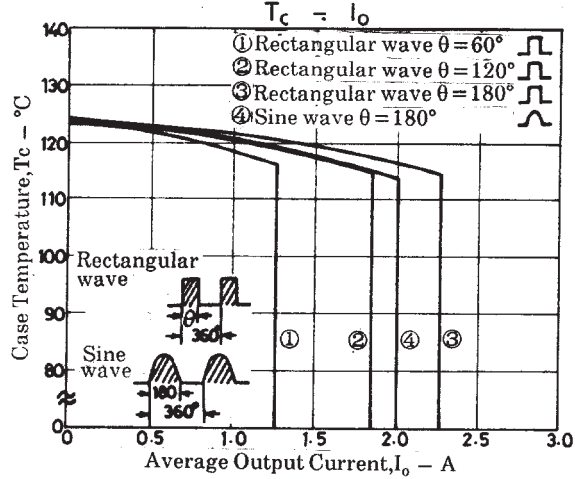
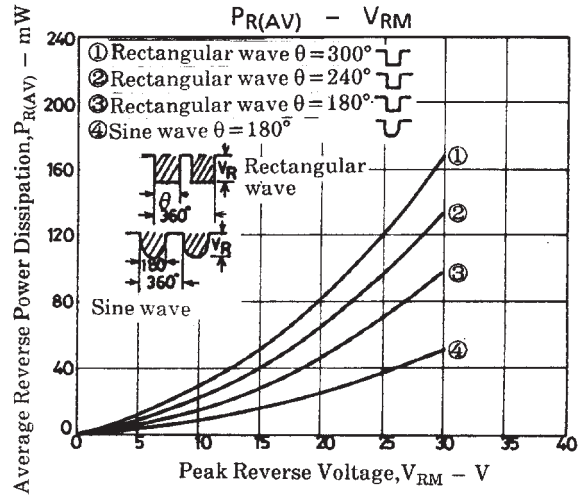
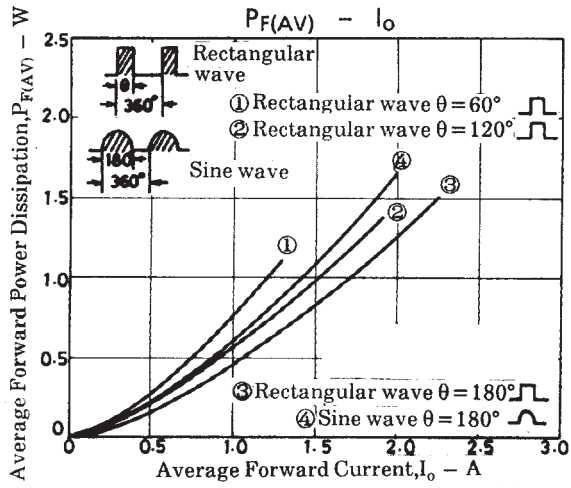
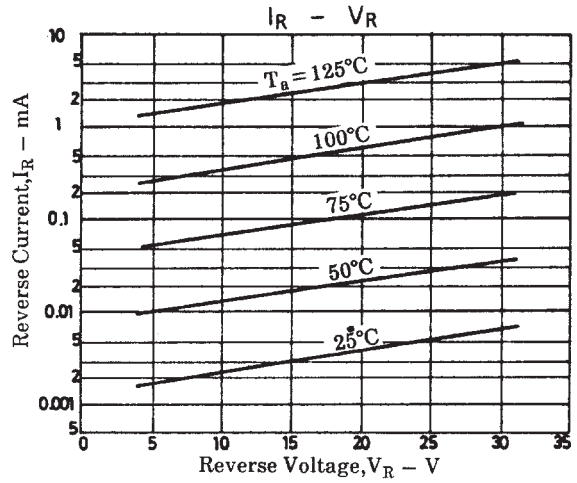
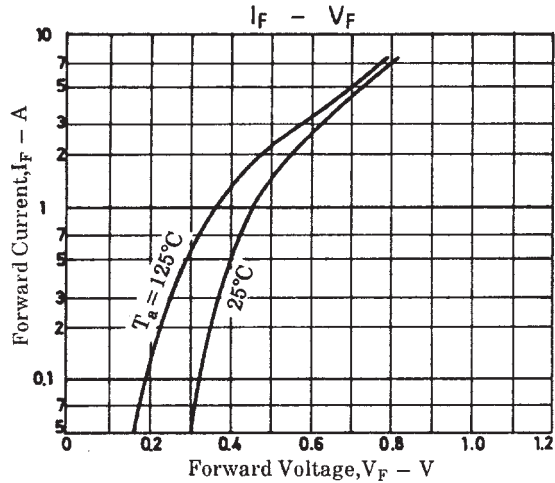
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=500\mu A$	30			V
Forward Voltage	V_F	$I_F=2A$			0.55	V
Reverse Current	I_R	$V_R=15V$			100	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		70		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See sepcified Test Circuit			20	ns
Thermal Resistance	R_{thj-c}	Junction-Case:Smoothed DC		7		$^{\circ}C/W$

trr Test Circuit



Unit (resistance:Ω)

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