



SB30-03F

Schottky Barrier Diode

30V, 3A Rectifier

Applications

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

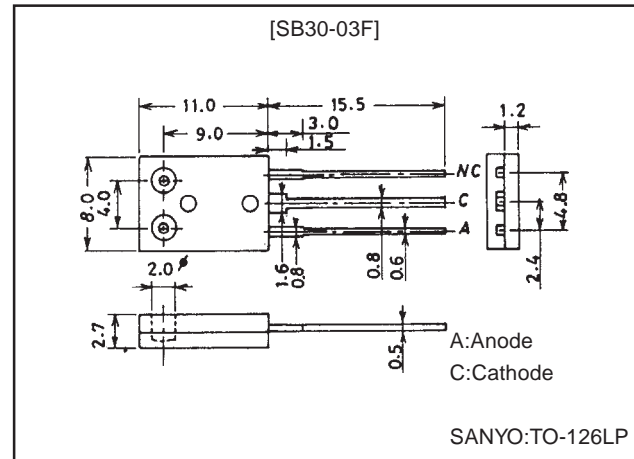
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1200



Specifications

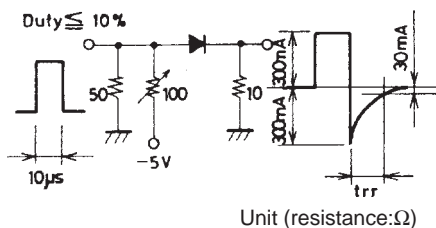
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

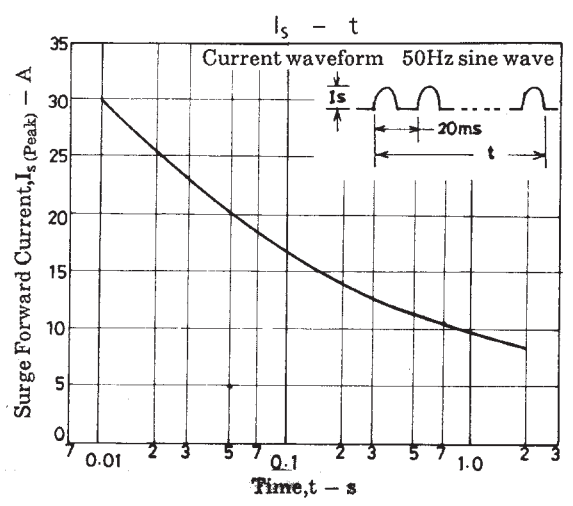
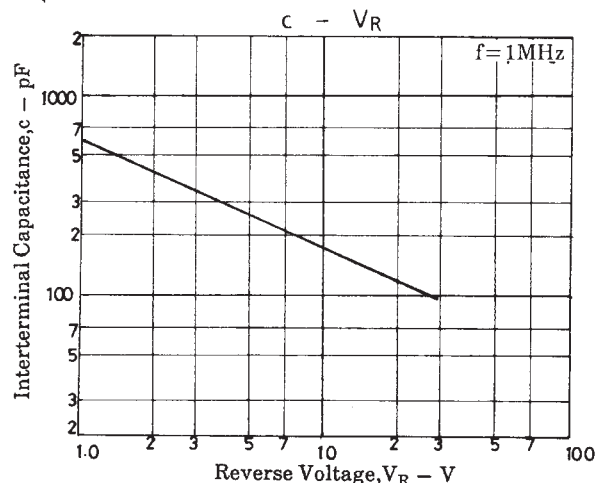
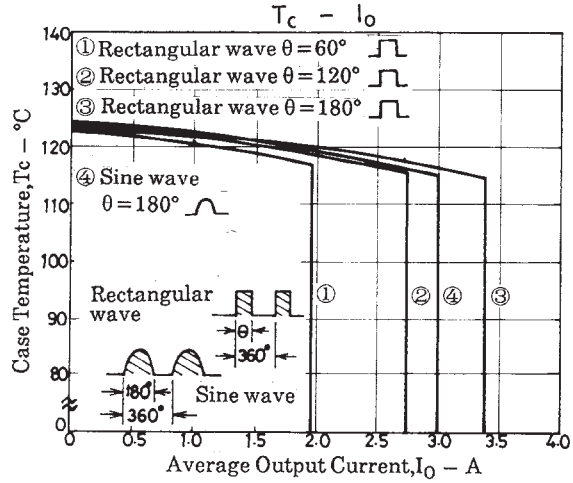
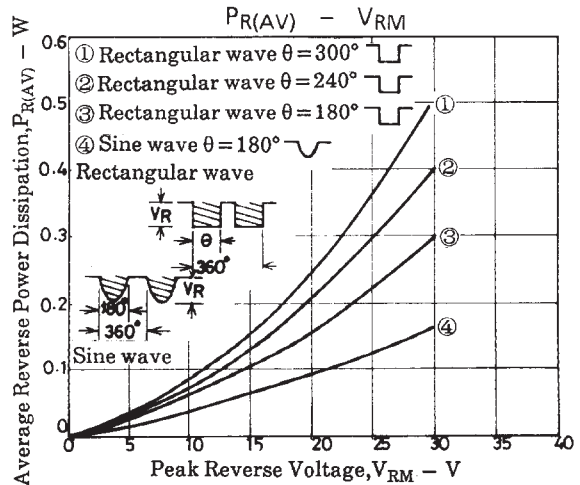
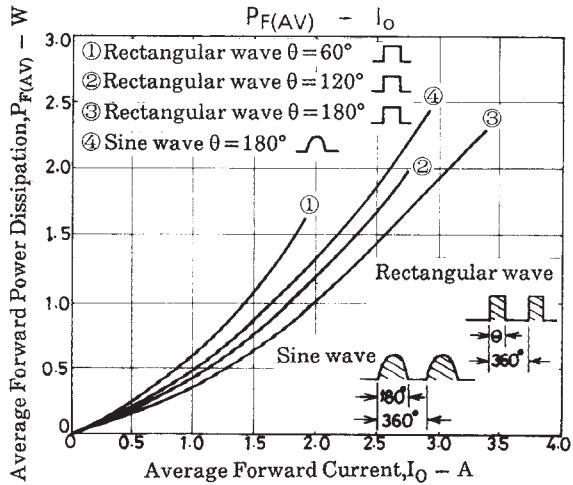
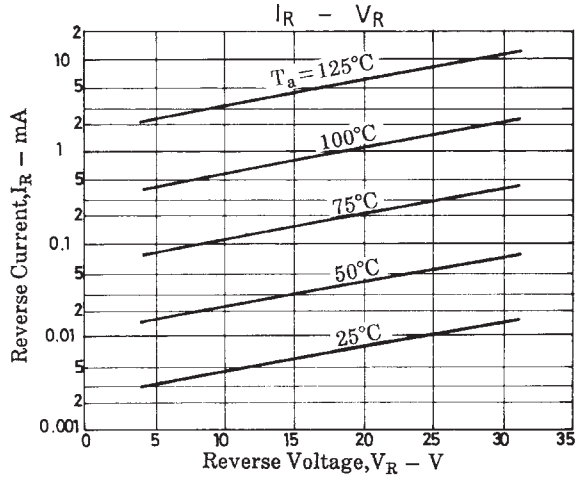
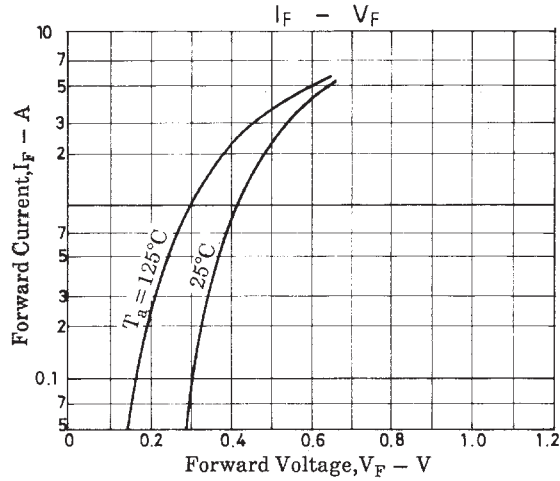
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O	50Hz, resistive load, $T_c=114^\circ\text{C}$	3	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	30	A
Junction Temperature	T_j		-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	$I_R=2\text{mA}$	30			V
Forward Voltage	V_F	$I_F=3\text{A}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			700	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		160		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=300\text{mA}$, See specified Test Circuit			30	ns
Thermal Resistance	R_{thj-c}	Junction-Case:Smoothed DC		4		$^\circ\text{C/W}$

t_{rr} Test Circuit





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