



SB07W03P

Schottky Barrier Diode (Twin Type · Cathode Common)

30V, 700mA Rectifier

Applications

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

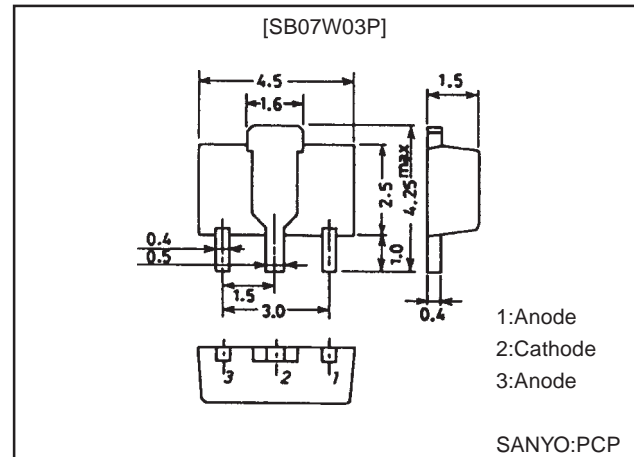
Features

- 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.

Package Dimensions

unit:mm

1239A



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Non-repetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		700	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

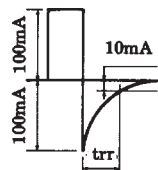
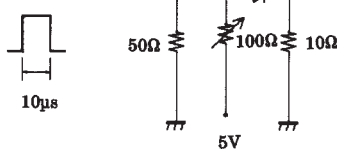
Electrical Characteristics at $T_a = 25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=700\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			50	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		28		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			300		$^\circ\text{C/W}$
	Rthj-a(2)	Mounted on 250mm ² ×0.8mm ceramic board		110		$^\circ\text{C/W}$

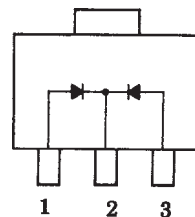
· Marking:SF

t_{rr} Test Circuit

Duty $\leq 10\%$



Electrical Connection

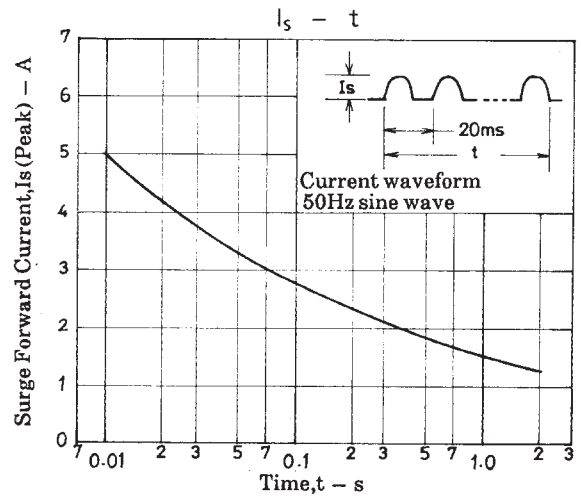
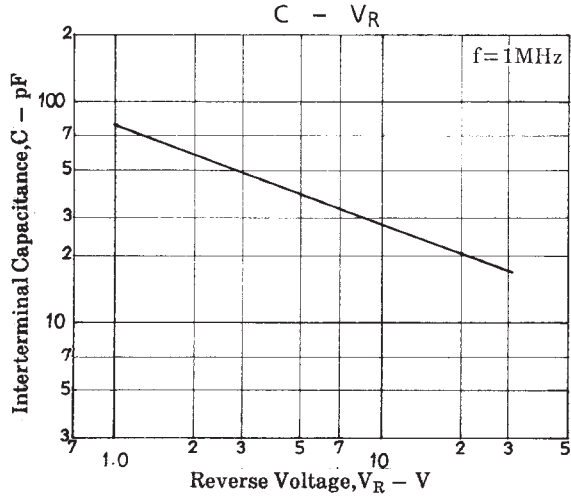
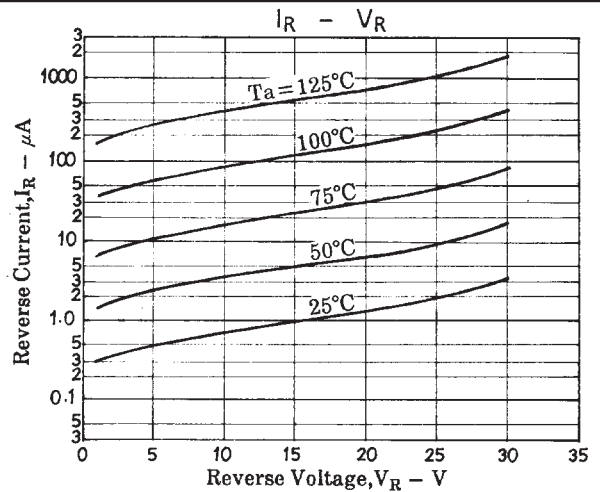
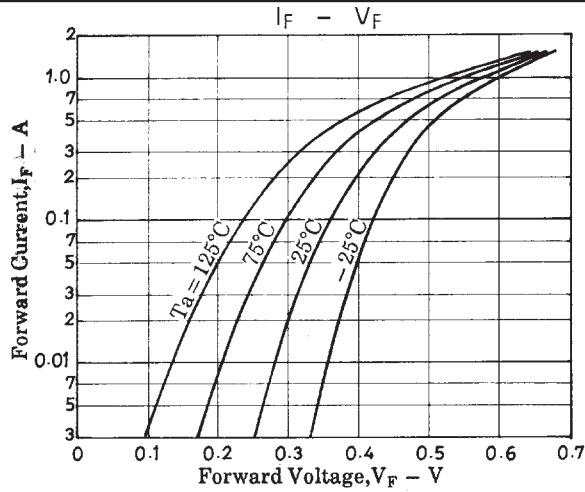


SANYO Electric Co., Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

43098HA (KT)/N120MH, JK No.3616-1/2

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