



SANYO Semiconductors

DATA SHEET

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.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO		700	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	A
Junction Temperature	TJ		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	$I_R=300\mu\text{A}$	30			V
Forward Voltage	VF	$I_F=700\text{mA}$			0.55	V
Reverse Current	IR	$V_R=15\text{V}$			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		°C / W
	Rthj-a(2)	Mounted on a ceramic board (250mm ² X0.8mm)		110		°C / W

Marking : SF

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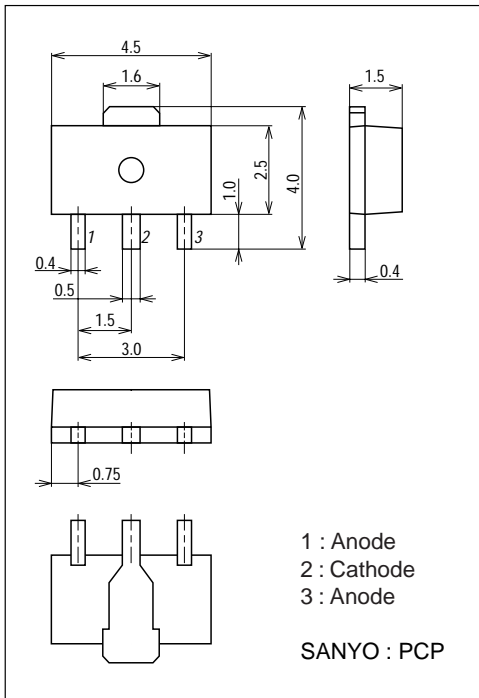
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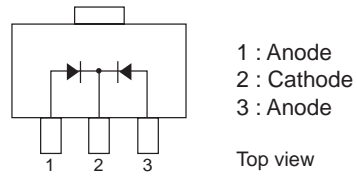
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Package Dimensions

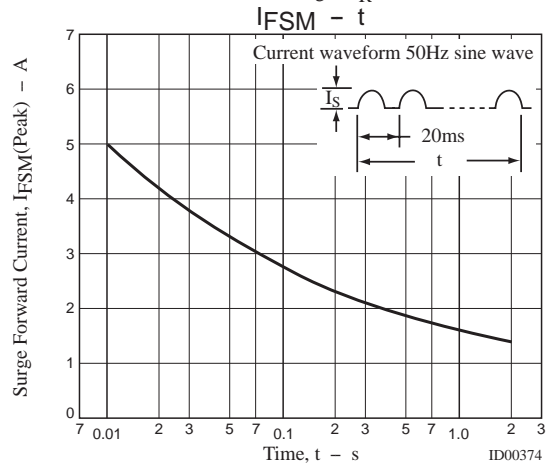
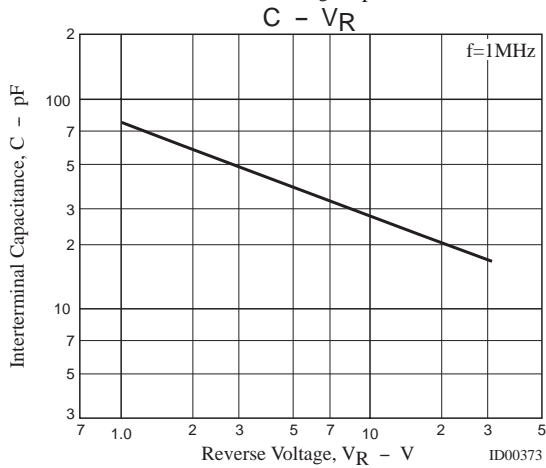
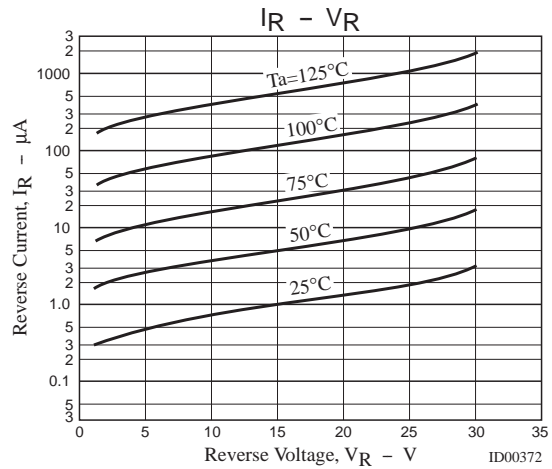
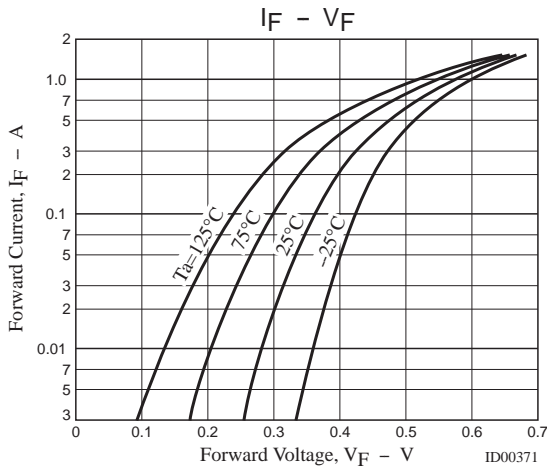
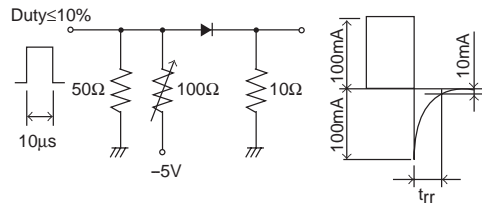
unit : mm
1239B



Electrical Connection



t_{rr} Test Circuit



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