



SANYO Semiconductors

DATA SHEET

SB10-015P

 — Schottky Barrier Diode

15V, 1A 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=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		15	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		17	V
Average Output Current	I_O		1	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	8	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	$I_R=300\mu\text{A}$	15			V
Forward Voltage	V_{F1}	$I_F=1\text{A}$			0.55	V
	V_{F2}	$I_F=100\text{mA}$			0.40	V
Reverse Current	I_R	$V_R=7.5\text{V}$			50	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		30		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a 1			310		$^\circ\text{C} / \text{W}$
	Rthj-a 2	Mounted on 250mm ² X0.8mm ceramic board		120		$^\circ\text{C} / \text{W}$

Marking : SI

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