


SANYO Semiconductors

DATA SHEET

SBS813 — Low VF Schottky Barrier Diode 30V, 3.0A Rectifier

Applications

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

Features

- Small switching noise.
- Low forward voltage ($I_F=3A$, $V_F \text{ max}=0.42V$).
- Ultrasmall package permitting applied sets to be small and slim.

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}		30	V
Average Output Current	I_O		3.0	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 $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=2.0\text{mA}$	30			V
Forward Voltage	V_F	$I_F=2.0\text{A}$		0.335	0.385	V
		$I_F=3.0\text{A}$		0.37	0.42	V
Reverse Current	I_R	$V_R=15\text{V}$			1.4	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		90		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			20	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (1200mm ² X0.8mm)		50		$^\circ\text{C} / \text{W}$

Marking : SF

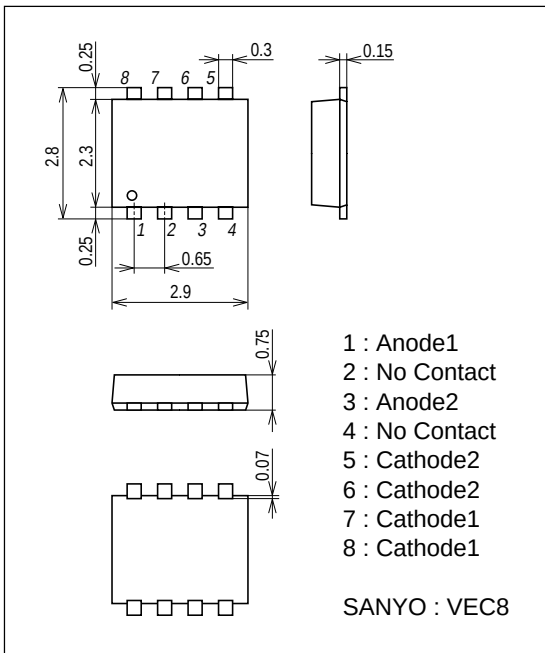
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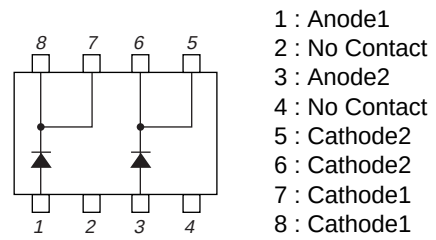
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Package Dimensions

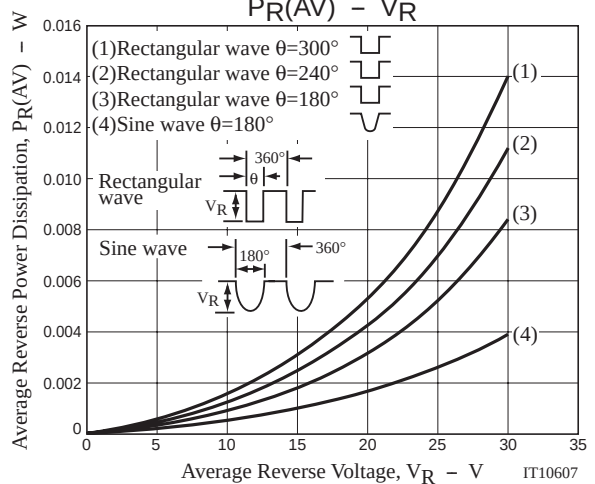
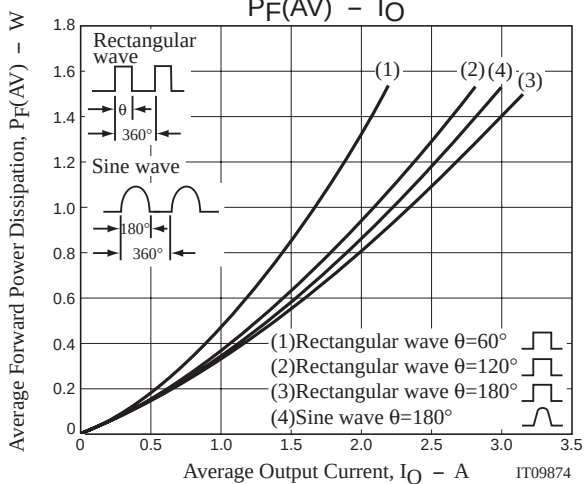
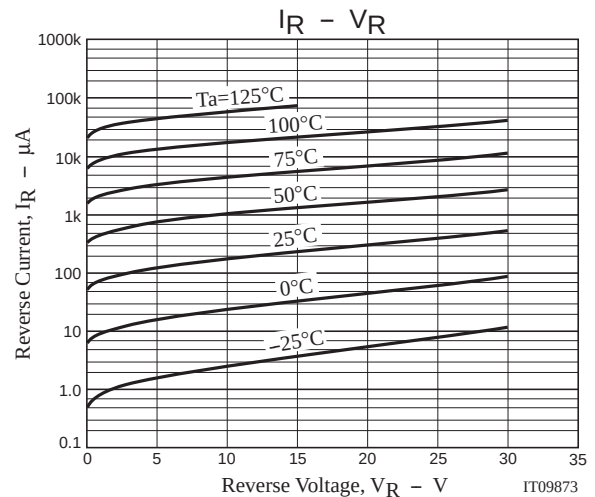
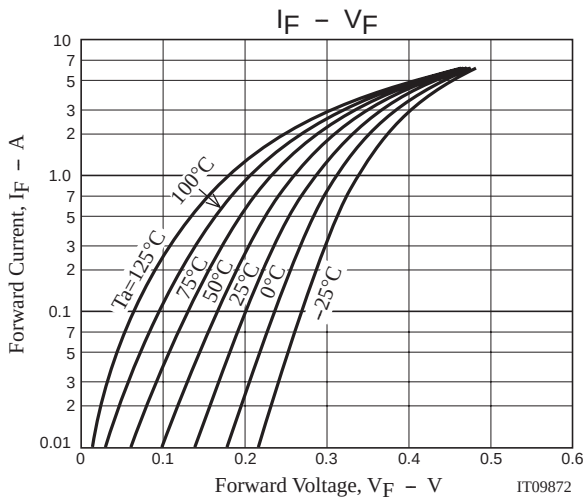
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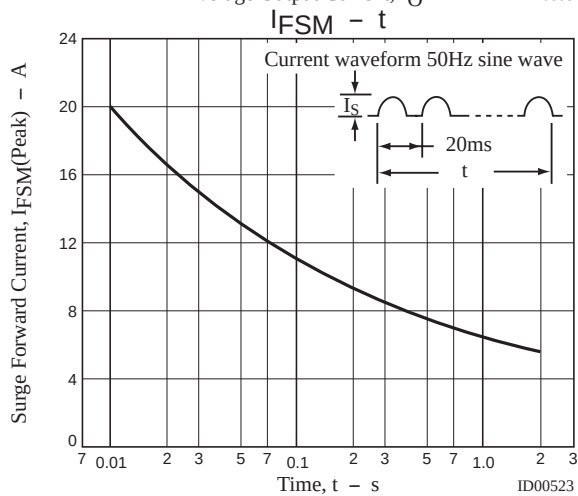
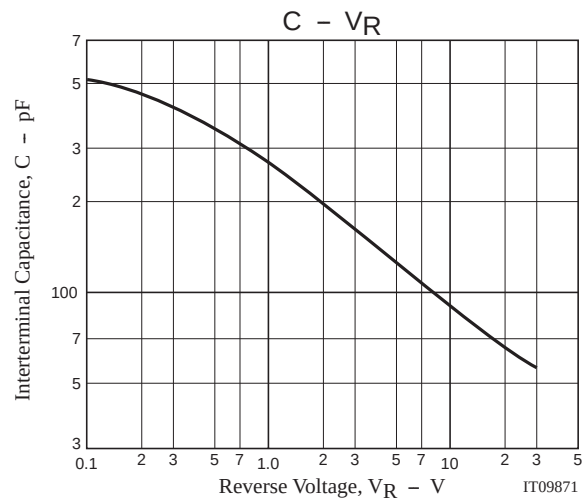
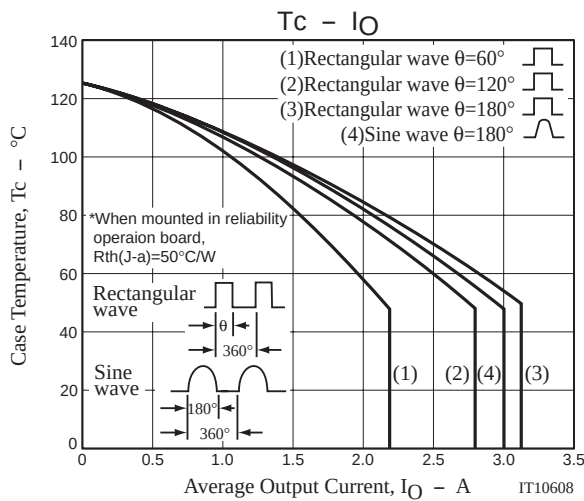


Electrical Connection



Top view





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