



SANYO Semiconductors

DATA SHEET

SBE813

 — Low IR Schottky Barrier Diode
30V, 3.0A Rectifier

Applications

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

Features

- Small switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultrasmall package permitting applied sets to be small and slim.

Specifications

Absolute Maximum Ratings at Ta=25°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		3.0	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	20	A
Junction Temperature	T_J		-55 to +125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.5mA$	30			V
Forward Voltage	V_{F1}	$I_F=2.0A$		0.435	0.485	V
	V_{F2}	$I_F=3.0A$		0.47	0.52	V
Reverse Current	I_R	$V_R=15V$			42	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		90		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			20	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (1200mm ² X0.8mm)		50		°C / W

Marking : SE

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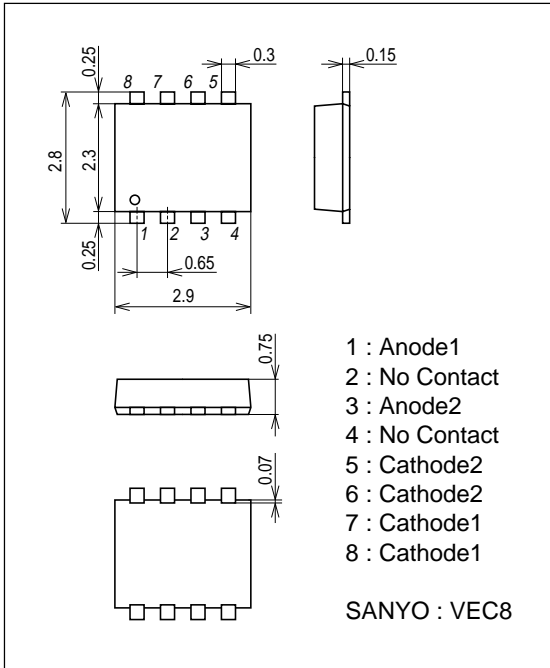
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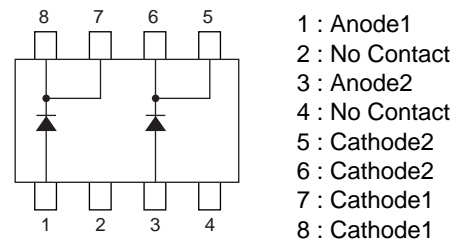
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Package Dimensions

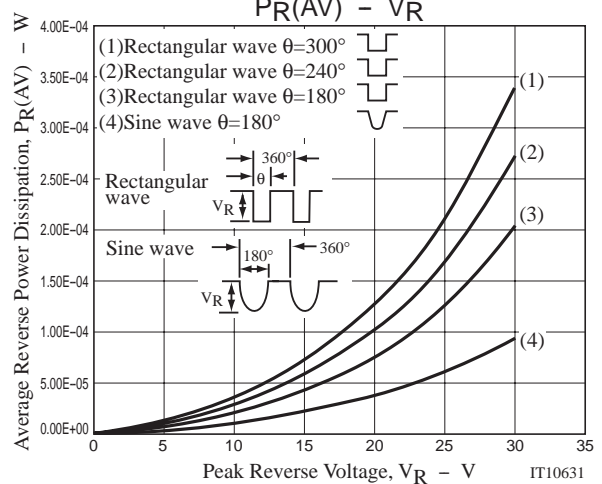
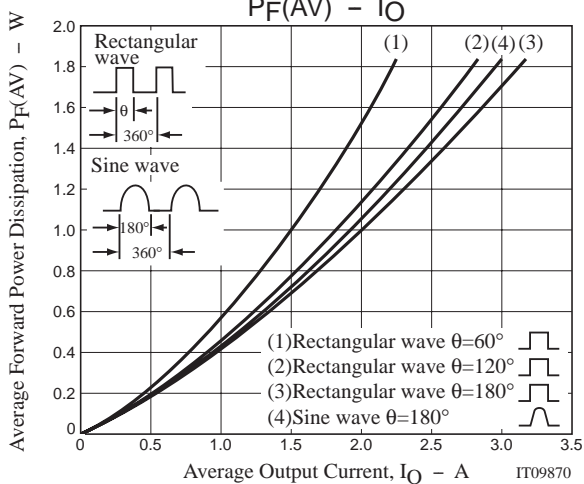
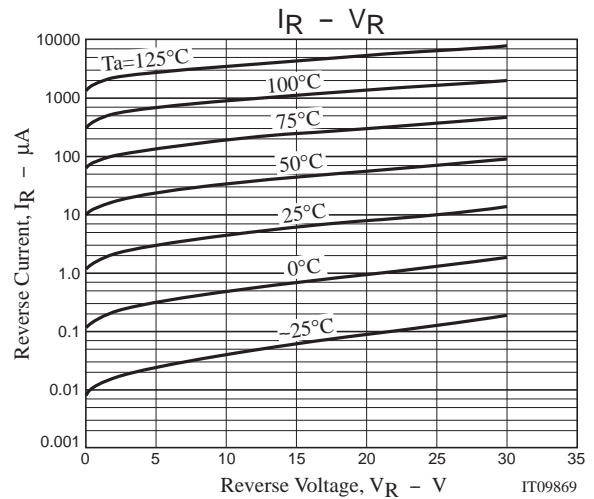
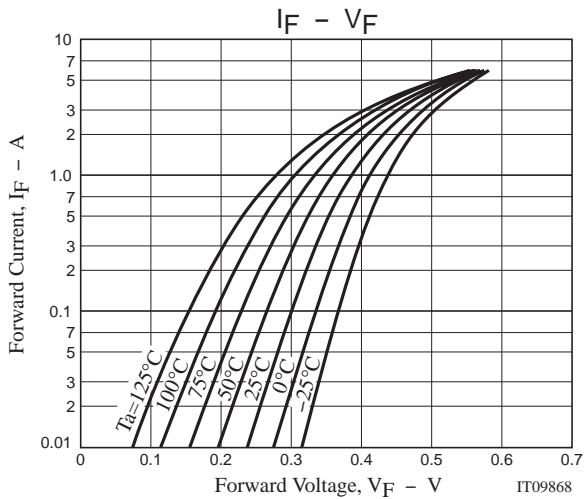
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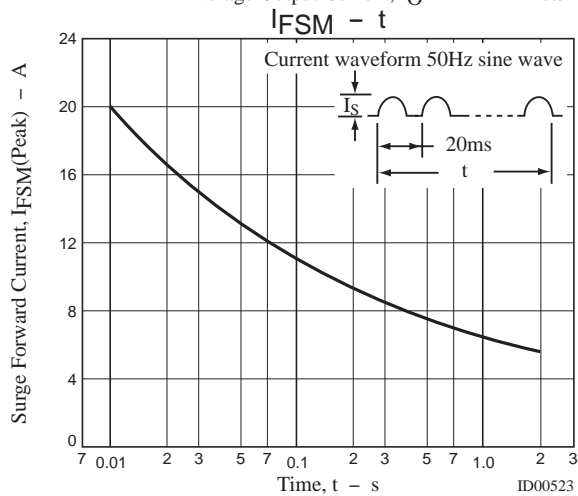
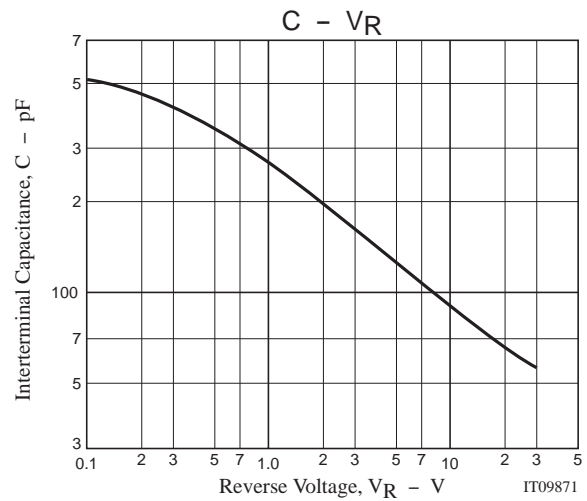
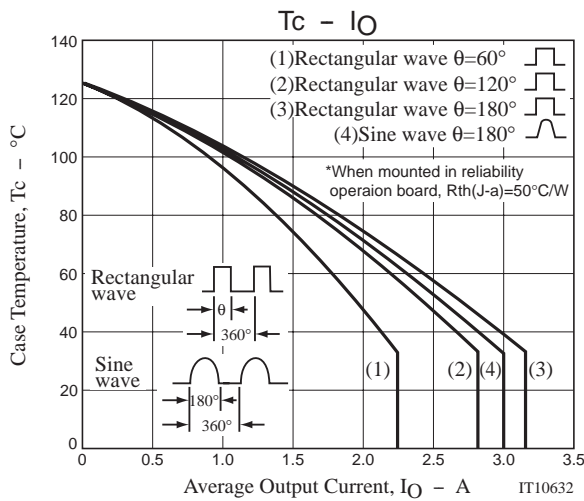


Electrical Connection



Top view





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