



SANYO Semiconductors

DATA SHEET

SBS814

 — Low VF Schottky Barrier Diode
30V, 1.0A Rectifier

Applications

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

Features

- Small switching noise.
- Low forward voltage ($I_F=1A$, $V_F \text{ max}=0.45V$).
- 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		1.0	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	10	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_{F1}	$I_F=500\text{mA}$			0.39	V
	V_{F2}	$I_F=1.0\text{A}$			0.45	V
Reverse Current	I_R	$V_R=15\text{V}$			360	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		27		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)1}$	Mounted in Cu-foiled area of $1.92\text{mm}^2 \times 0.03\text{mm}$ on glass epoxy board		95		$^\circ\text{C} / \text{W}$
	$R_{th(j-a)2}$	Mounted on a ceramic board ($1200\text{mm}^2 \times 0.8\text{mm}$)		65		$^\circ\text{C} / \text{W}$

Marking : SG

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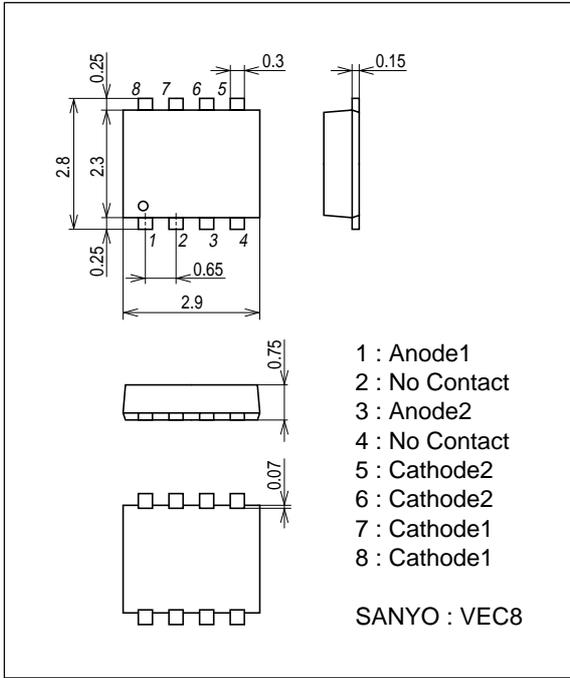
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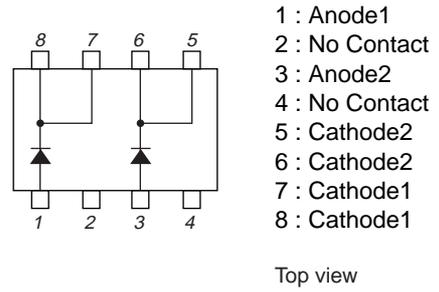
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Package Dimensions

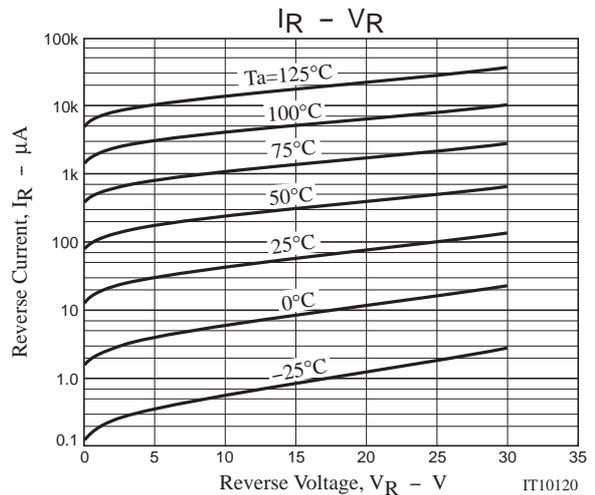
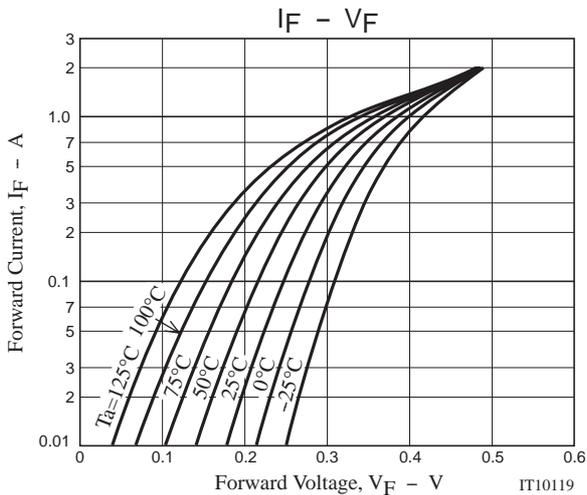
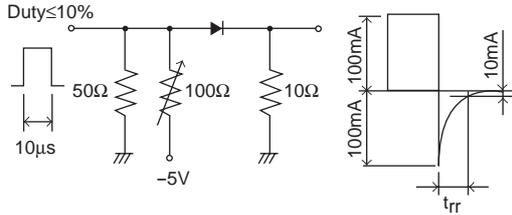
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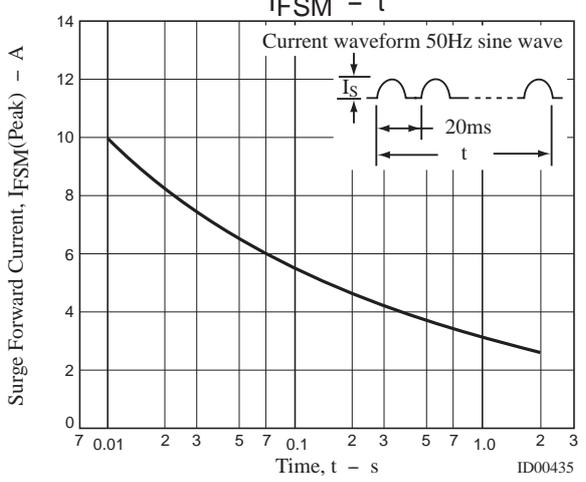
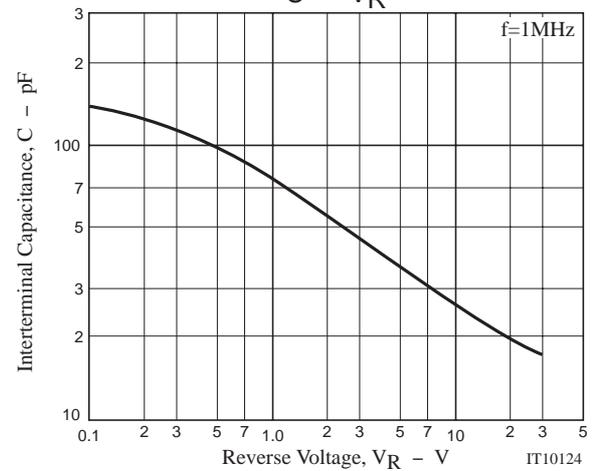
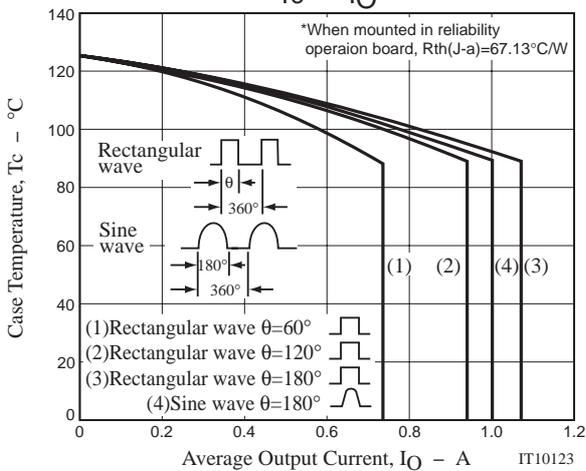
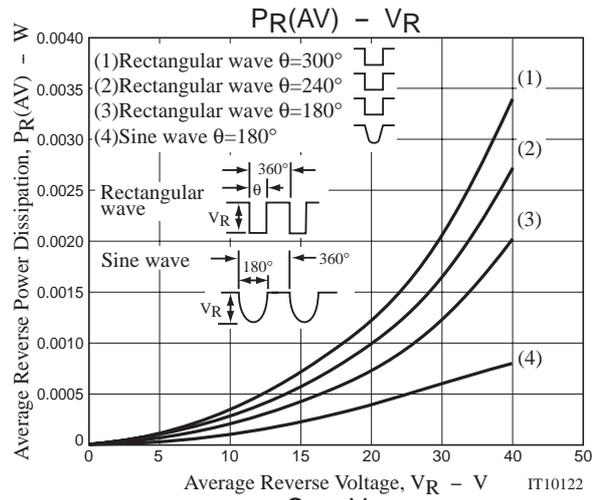
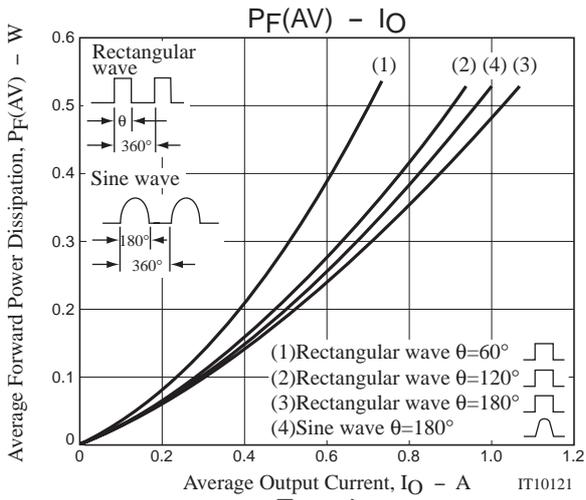


Electrical Connection



t_{rr} Test Circuit





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