

SBS811

Schottky Barrier Diode 30V, 2A, Low VF, Non-Monolithic Dual VEC8 Common Cathode



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SBS811 is Schottky barrier diode, Low VF, Non-monolithic dual VEC8 common cathode for high frequency rectification applications.

Features

- Small Switching Noise
- Low Forward Voltage ($I_F=2A$, $V_F \text{ max } \approx 0.40V$)

Typical Applications

- Switching Regulators
- Converters
- Choppers

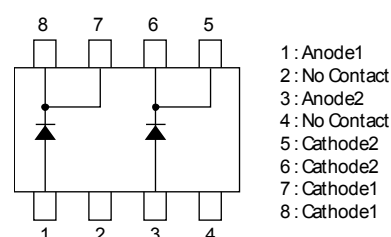
SPECIFICATIONS

ABSOLUTE MAXIMUM RATING at $T_a = 25^\circ\text{C}$ (Note 1)

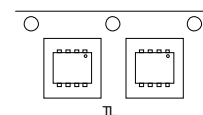
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}	30	V
Average Output Current	I_O	2.0	A
Surge Forward Current 50Hz sine wave, 1 cycle	I_{FSM}	10	A
Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note 1 : Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

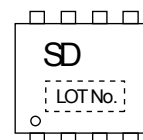
ELECTRICAL CONNECTION



PACKING TYPE : TL



MARKING



ORDERING INFORMATION

See detailed ordering and shipping information on page 4 of this data sheet.

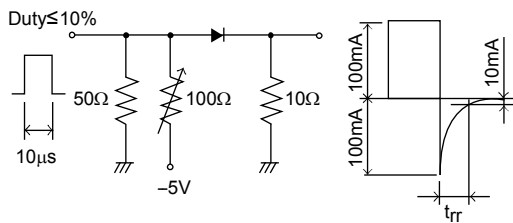
SBS811

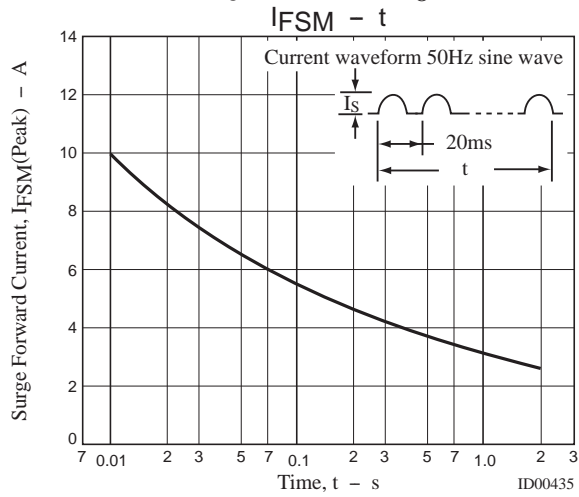
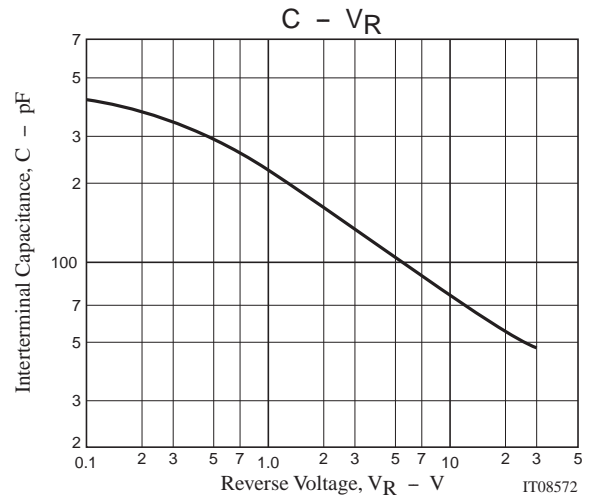
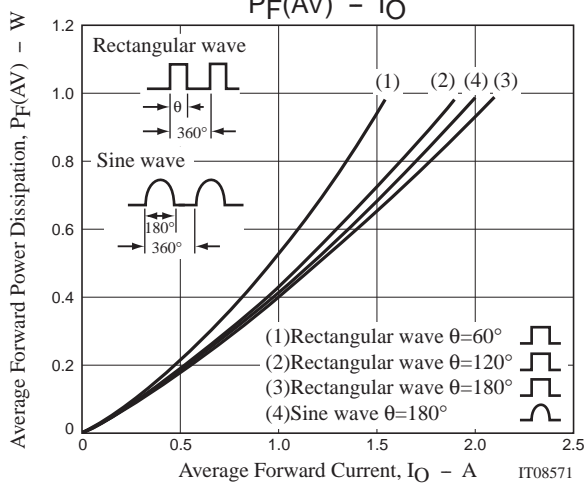
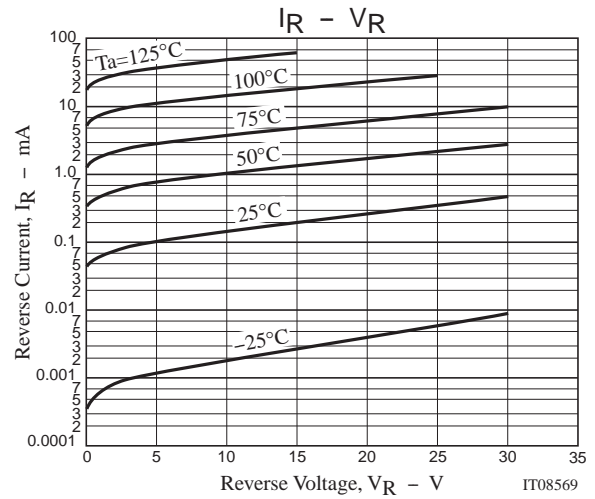
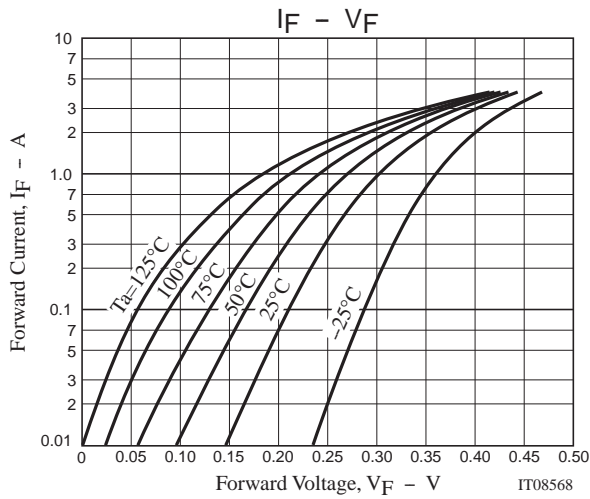
ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 2)

Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=2.0\text{mA}$	30			V
Forward Voltage	V_F	$I_F=1.0\text{A}$		0.30	0.35	V
		$I_F=2.0\text{A}$		0.35	0.40	V
Reverse Current	I_R	$V_R=15\text{V}$			1.25	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		75		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit			20	ns
Thermal Resistance	$R_{th(j-a)1}$	When mounted in Cu-foiled area of $1.92\text{mm}^2 \times 0.03\text{mm}$ on glass epoxy substrate		75		°C/W
	$R_{th(j-a)2}$	When mounted on ceramic substrate ($1000\text{mm}^2 \times 0.8\text{mm}$)		70		°C/W

Note 2 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

Switching Time Test Circuit



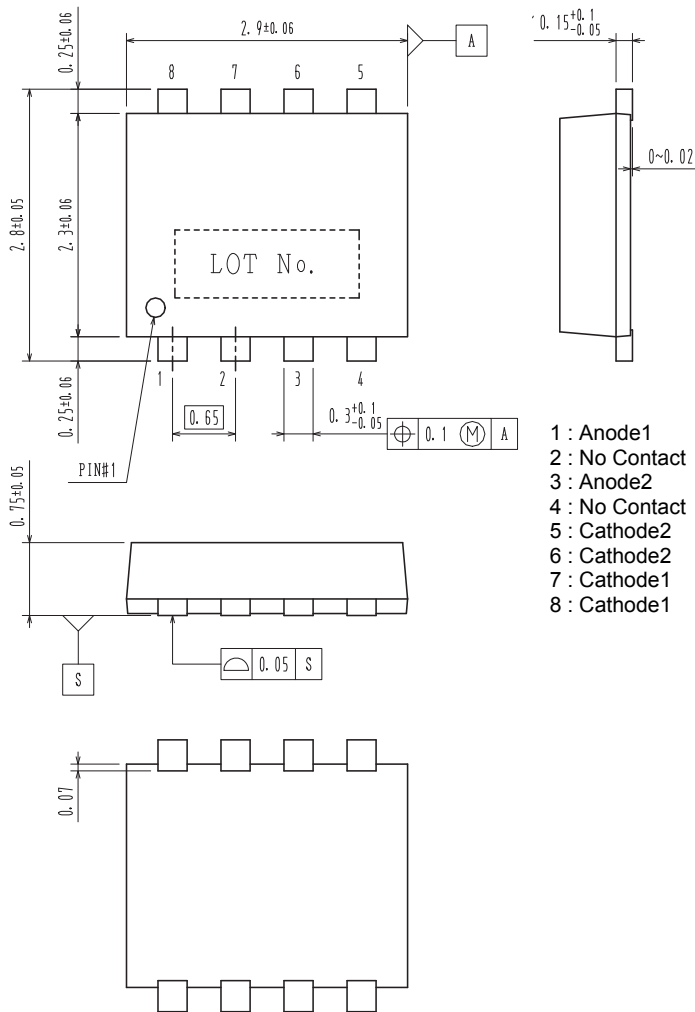


SBS811

PACKAGE DIMENSIONS

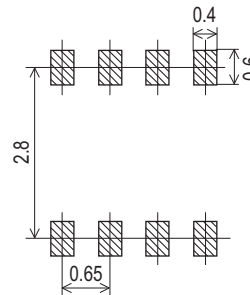
unit : mm

SOT-28FL / VEC8
CASE 318AH
ISSUE O



- 1 : Anode1
- 2 : No Contact
- 3 : Anode2
- 4 : No Contact
- 5 : Cathode2
- 6 : Cathode2
- 7 : Cathode1
- 8 : Cathode1

Recommended Soldering Footprint



ORDERING INFORMATION

Device	Marking	Package	Shipping (Qty / Packing)
SBS811-TL-E	SD	SOT-28FL / VEC8 (Pb-Free)	3,000 / Tape & Reel

† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D. http://www.onsemi.com/pub_link/Collateral/BRD8011-D.PDF

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