

# 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 ( $I_F=2A$ ,  $V_F$  max  $\pm 0.40V$ )

### Typical Applications

- Switching Regulators
- Converters
- Choppers

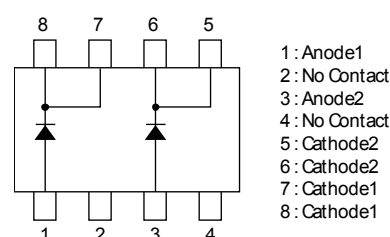
### SPECIFICATIONS

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

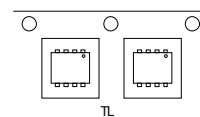
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$	30	V
Average Output Current	$I_O$	2.0	A
Surge Forward Current 50Hz sine wave, 1 cycle	$I_{FSM}$	10	A
Junction Temperature	$T_j$	-55 to +125	$^\circ C$
Storage Temperature	$T_{stg}$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

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.

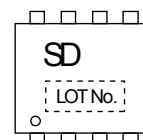
### ELECTRICAL CONNECTION



### PACKING TYPE : TL



### MARKING



### ORDERING INFORMATION

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

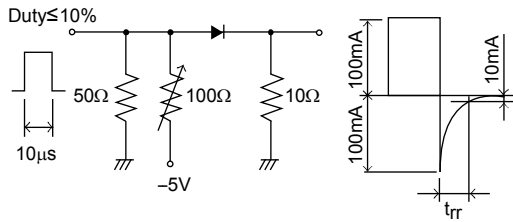
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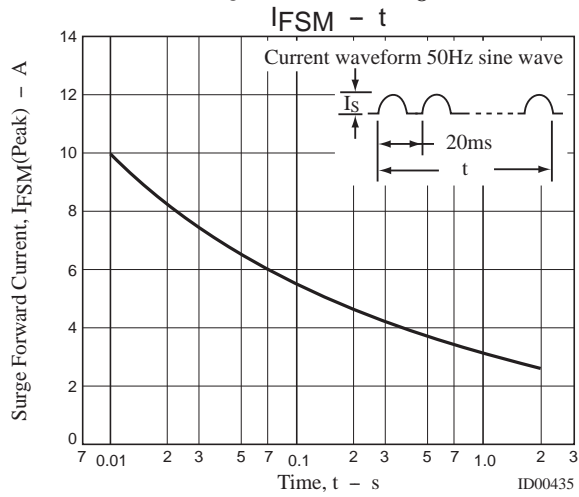
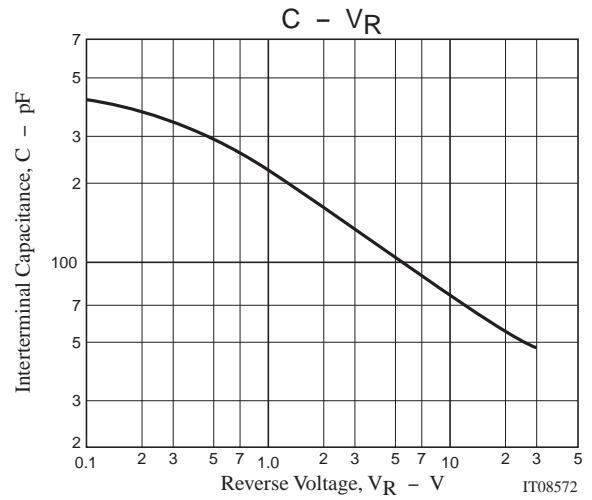
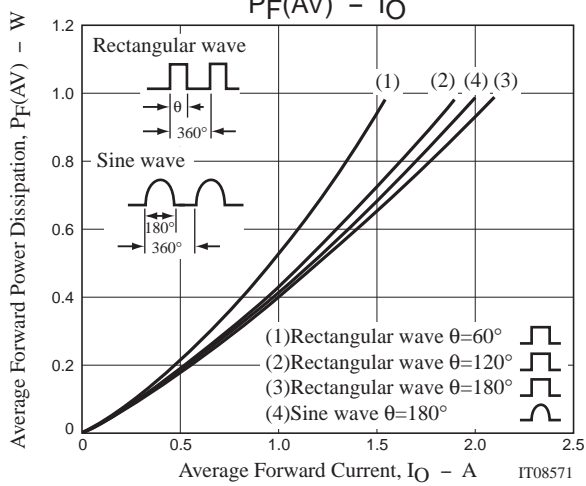
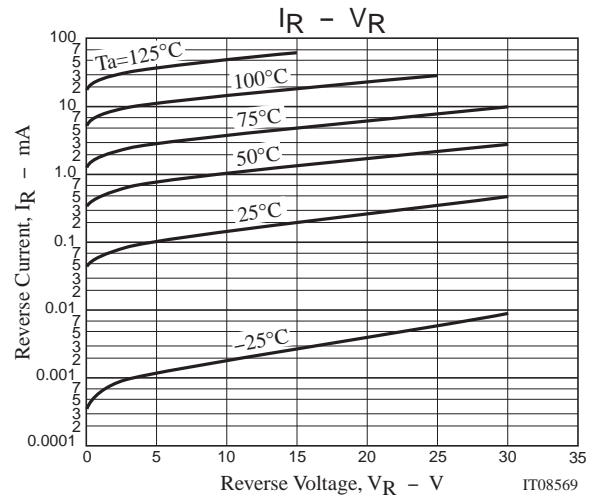
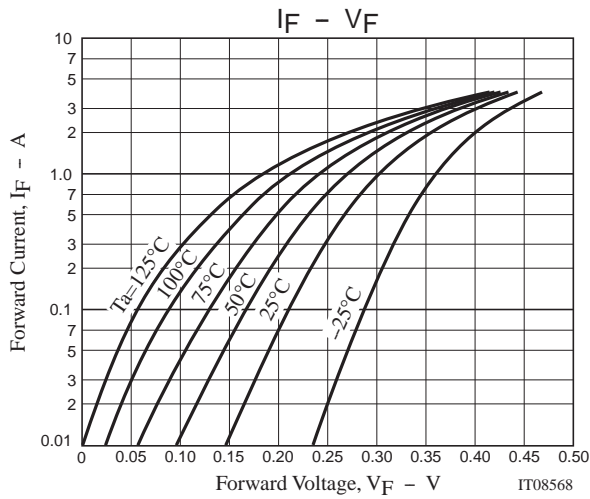
## ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 2)

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



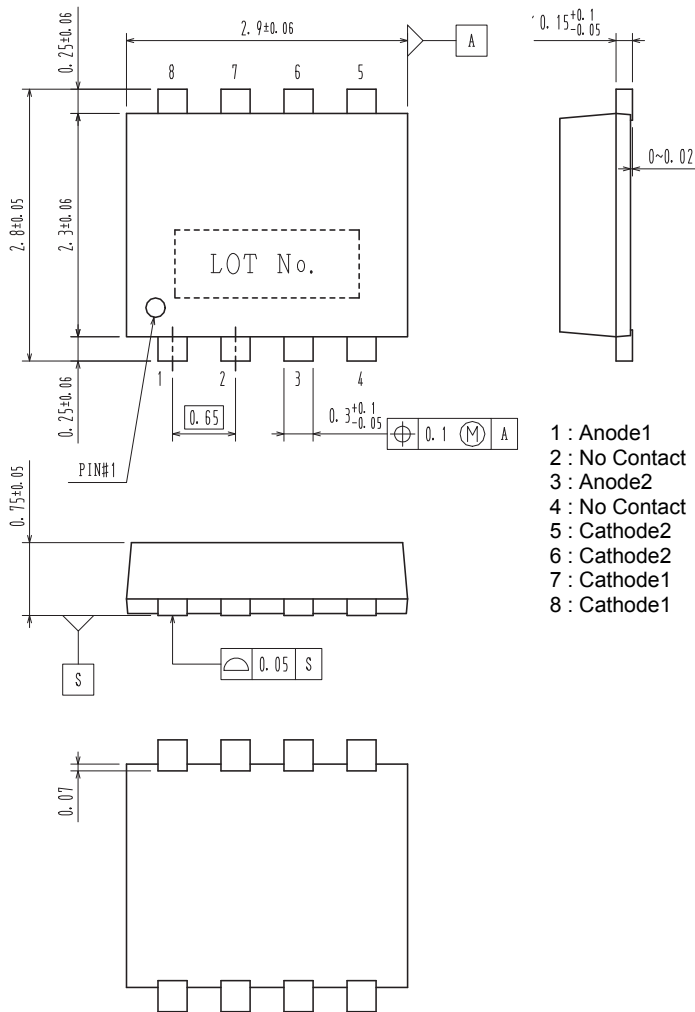


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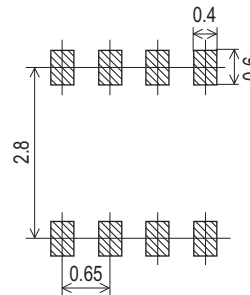
## PACKAGE DIMENSIONS

unit : mm

SOT-28FL / VEC8  
CASE 318AH  
ISSUE O



## 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](http://www.onsemi.com/pub_link/Collateral/BRD8011-D.PDF)

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