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# SBS822

## Schottky Barrier Diode 20V, 1A, Low VF Dual MCPH5

### Applications

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

### Features

- Low forward voltage ( $I_F=0.5A$ ,  $V_F \text{ max}=0.39V$ ) ( $I_F=1A$ ,  $V_F \text{ max}=0.46V$ ).
- Composite type with 2 low VF SBDs in one package, facilitating high-density mounting.
- Ultrasmall-size package permitting applied sets to be small and slim (Mounting height 0.85mm).
- Halogen free compliance.

### Specifications

**Absolute Maximum Ratings** at  $T_a=25^\circ\text{C}$  (Value per element)

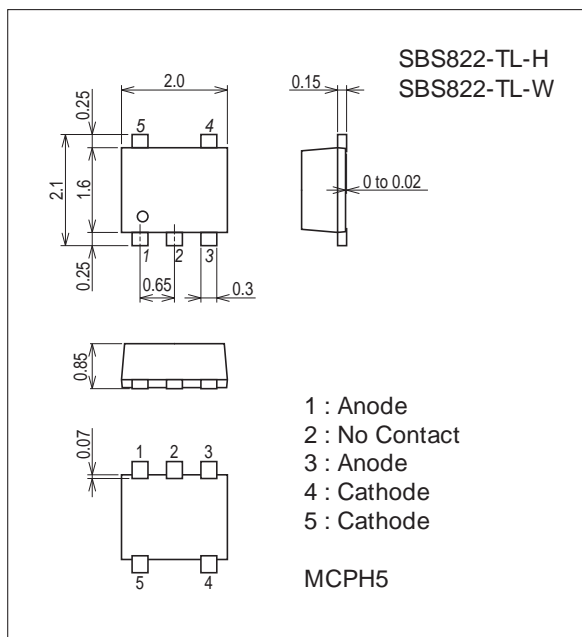
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		20	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		20	V
Average Output Current	$I_O$	When mounted on ceramic substrate (1000mm <sup>2</sup> ×0.8mm) Rectangular wave	1	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	5	A
Junction Temperature	$T_J$		-55 to +125	°C
Storage Temperature	$T_{stg}$		-55 to +125	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions

unit : mm (typ)

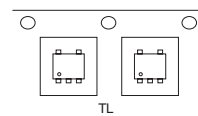
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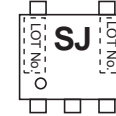
### Ordering & Package Information

Device	Package	Shipping	note
SBS822-TL-H	MCPH5 SC-88A, SC-70-5, SOT-353	3,000 pcs./reel	Pb-Free and Halogen Free
SBS822-TL-W	MCPH5 SC-88A, SC-70-5, SOT-353	3,000 pcs./reel	

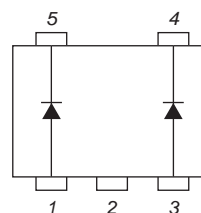
### Packing Type : TL



### Marking

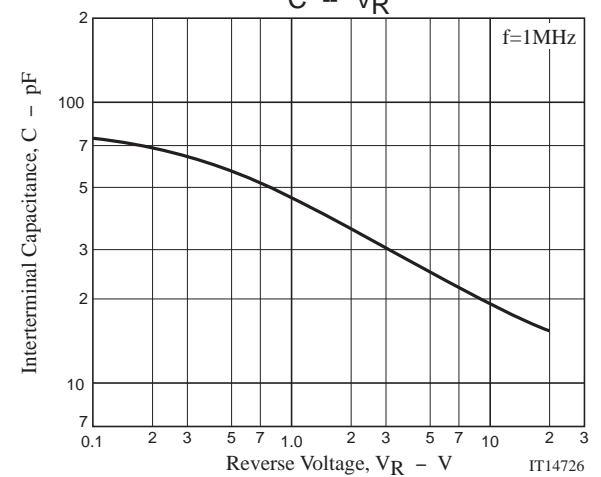
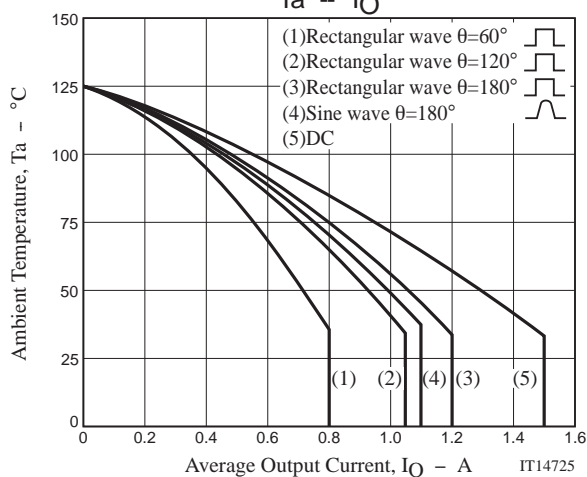
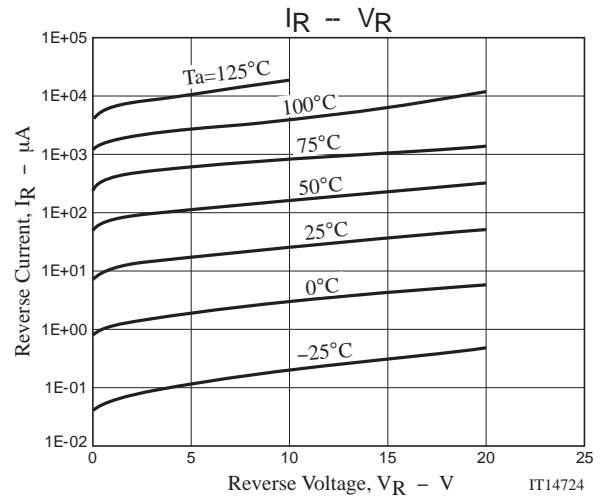
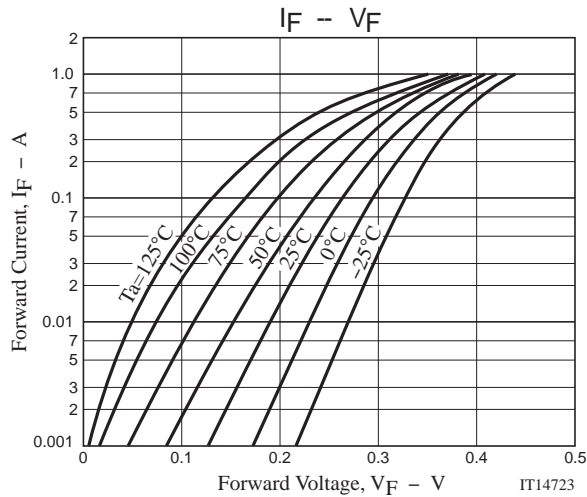
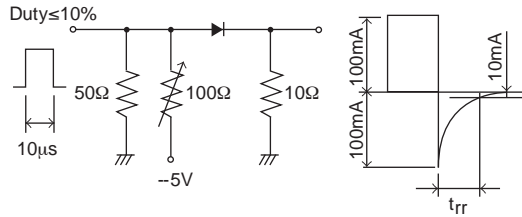


### Electrical Connection



**Electrical Characteristics** at  $T_a=25^\circ\text{C}$  (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=0.5\text{mA}$	20			V
Forward Voltage	$V_{F1}$	$I_F=0.5\text{A}$		0.34	0.39	V
	$V_{F2}$	$I_F=0.7\text{A}$		0.37	0.42	V
	$V_{F3}$	$I_F=1\text{A}$		0.41	0.46	V
Reverse Current	$I_R$	$V_R=10\text{V}$			110	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		19		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	When mounted on ceramic substrate ( $1000\text{mm}^2 \times 0.8\text{mm}$ )		130		$^\circ\text{C} / \text{W}$

 **$t_{rr}$  Test Circuit**



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