

**SBS004** 

# 15V, 1A Rectifier

# **Applications**

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

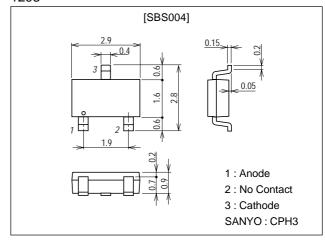
#### **Features**

- $\cdot$  Low forward voltage (I  $_{F}$  =0.5 A, V  $_{F}$  max=0.35 V) (I  $_{F}$  =1.0 A, V  $_{F}$  max=0.4 V).
- · Ultrasmall-sized package, permitting SBS004-applied sets to be compact and slim.

# **Package Dimensions**

unit:mm

1293



# **Specifications**

### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		15	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		15	V
Average Output Current	IO		1	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

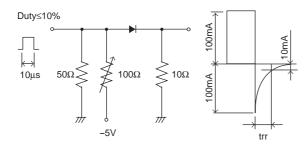
#### Electrical Characteristics at Ta = 25°C

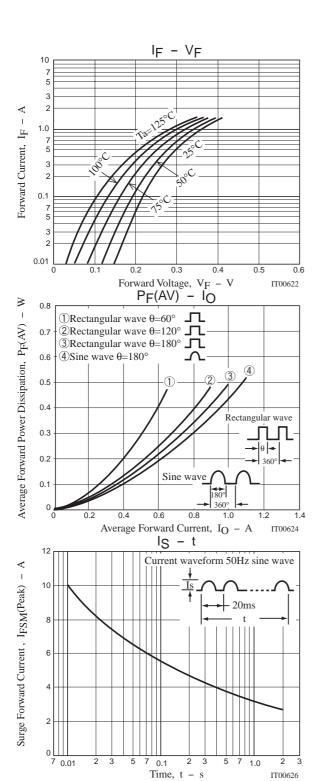
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	$V_{R}$	I <sub>R</sub> =1mA	15			V
Forward Voltage	V <sub>F</sub> 1	I <sub>F</sub> =0.5A		0.30	0.35	V
	V <sub>F</sub> 2	I <sub>F</sub> =1A		0.35	0.40	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =6V			500	μA
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		42		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit.			15	ns
Thermal Resistance	Rth(j-a)	Mounted on a ceramic board (600mm²×0.8mm)		110		°C/W

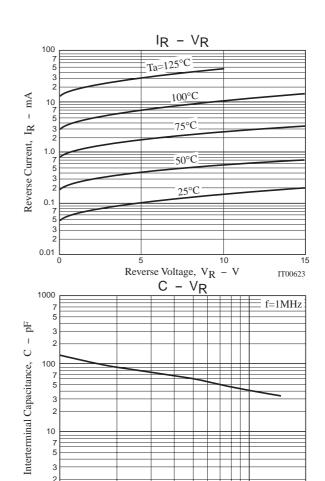
Marking : SC

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# t<sub>rr</sub> Test Circuit







5

Reverse Voltage, V<sub>R</sub> - V

1.0

1.0

IT00625

#### **SBS004**

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