

**SBS005****30V, 1A Rectifier**

Applications

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

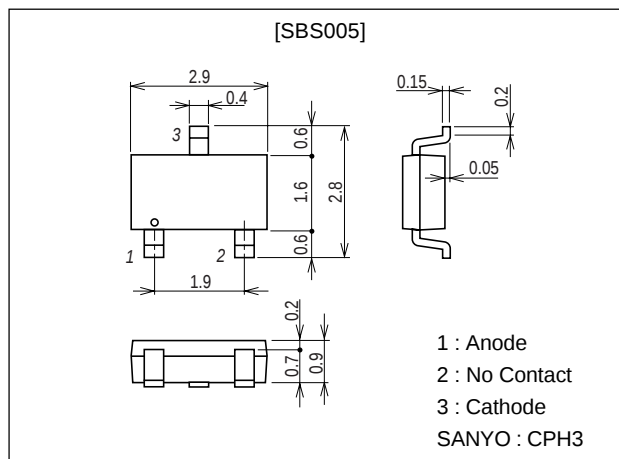
Features

- Low forward voltage ($I_F=0.5A$, $V_F \text{ max}=0.40V$) ($I_F=1.0A$, $V_F \text{ max}=0.47V$).
- Ultrasmall-sized package, permitting SBS005-applied sets to be compact and slim.

Package Dimensions

unit:mm

1293



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	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	$I_R=1mA$	30			V
Forward Voltage	V_{F1}	$I_F=0.5A$		0.35	0.40	V
	V_{F2}	$I_F=1A$		0.42	0.47	V
Reverse Current	I_R	$V_R=15V$			500	μA
Interterminal Capacitance	C	$V_R=10V$, $f=1MHz$		35		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			15	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm ² ×0.8mm)		110		$^\circ\text{C/W}$

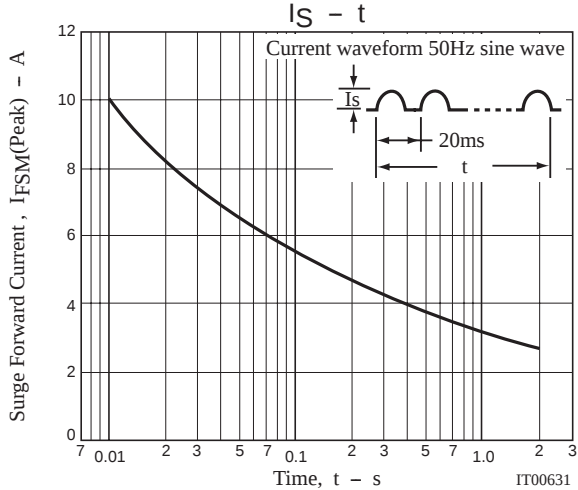
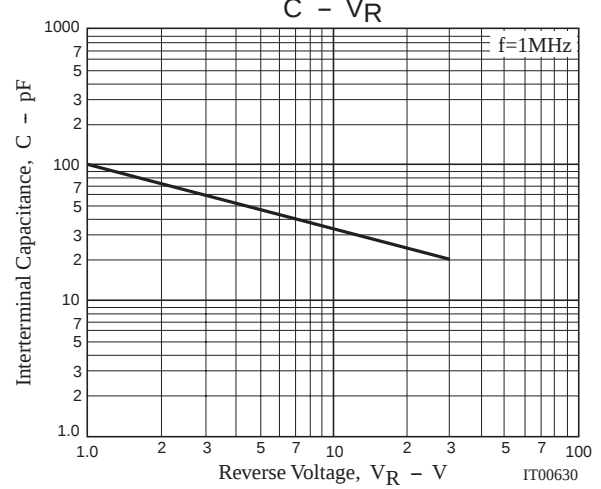
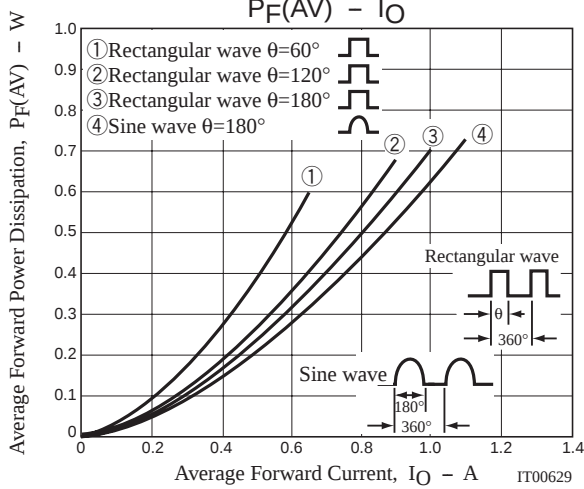
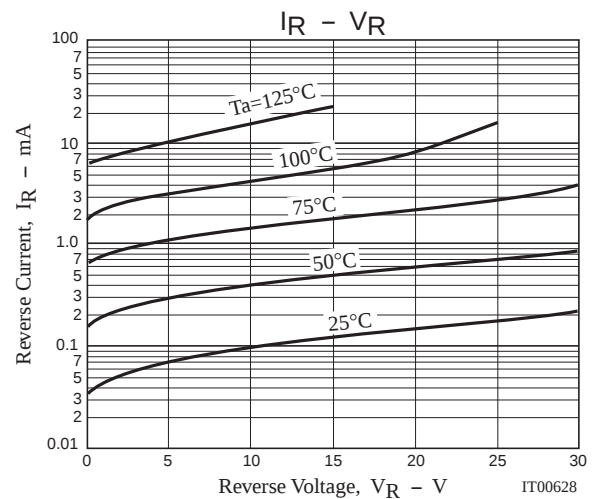
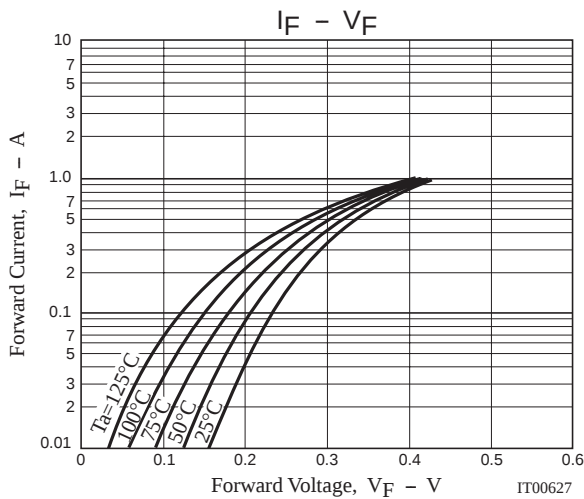
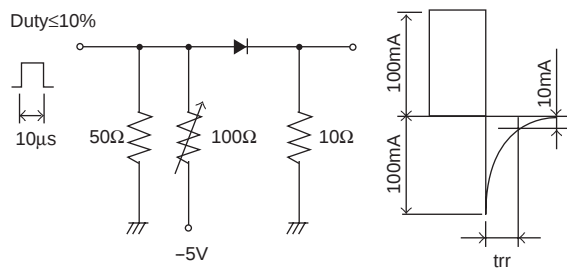
Marking : SD

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t_{rr} Test Circuit

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