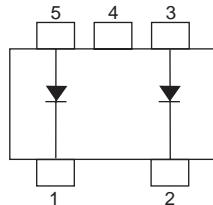


**30V, 1A Rectifier****Applications**

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

**Features**

- Low forward voltage ( $I_F=0.5A$ ,  $V_F$  max=0.40V) ( $I_F=1.0A$ ,  $V_F$  max=0.47V).
- Short reverse recovery time( $t_{rr}$  max.=15ns).
- Composite type with 2 low VF SBDs in one package, facilitating high-density mounting.
- The SBS805 is composed of 2 chips that are equivalent to the SBS005.

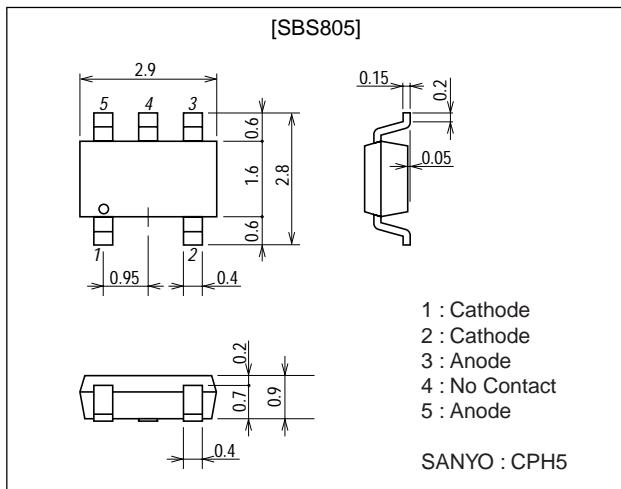
**Electrical Connection**

1 : Cathode  
 2 : Cathode  
 3 : Anode  
 4 : No Contact  
 5 : Anode

**Package Dimensions**

unit : mm

1294

**Specifications****Absolute Maximum Ratings** at  $T_a=25^\circ C$ 

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		30	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		30	V
Average Output Current	I <sub>O</sub>		1	A
Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, 1 cycle	10	A
Junction Temperature	T <sub>j</sub>		-55 to +125	°C
Storage Temperature	T <sub>stg</sub>		-55 to +125	°C

Marking : SD

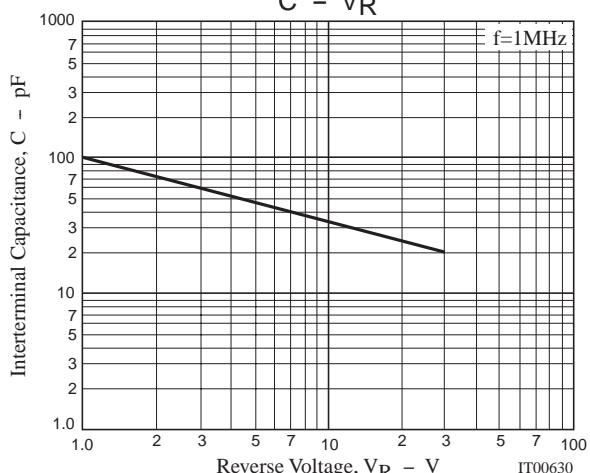
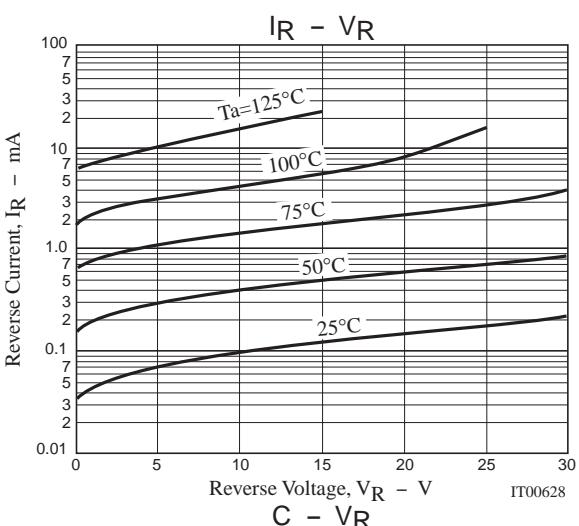
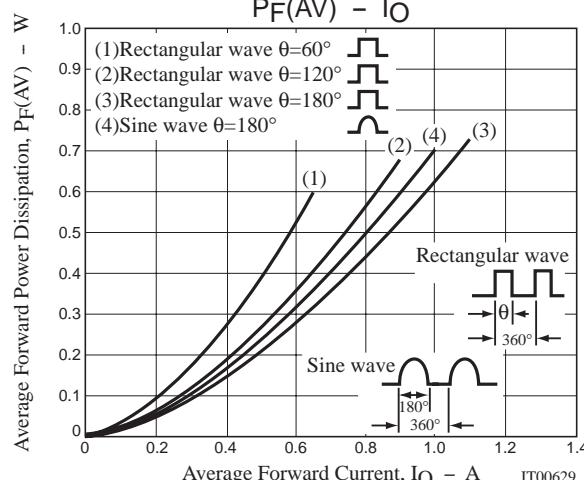
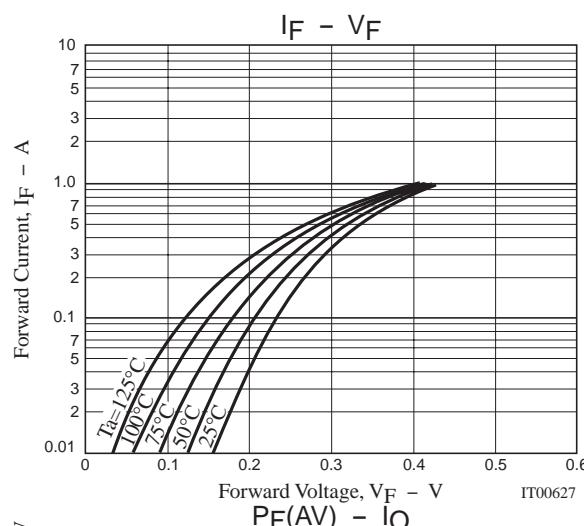
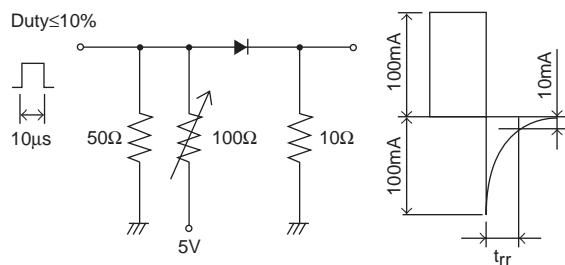
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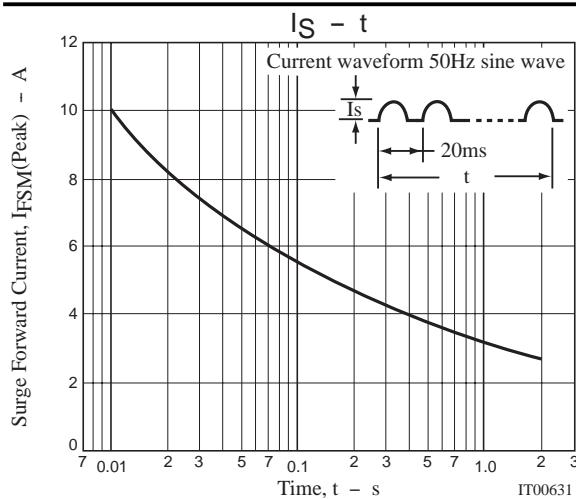
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**Electrical Characteristics** at  $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$	30			V
Forward Voltage	$V_F1$	$I_F=0.5\text{A}$		0.35	0.40	V
	$V_F2$	$I_F=1\text{A}$		0.42	0.47	V
Reverse Current	$I_R$	$V_R=15\text{V}$			500	$\mu\text{A}$
Interterminal Capacitance	$C$	$V_R=10\text{V}, f=1\text{MHz}$	35			pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			15	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm $^2$ ×0.8mm)		110		$^\circ\text{C/W}$

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





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