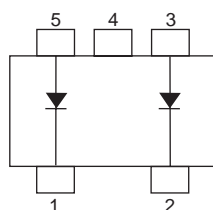


**SBS805****30V, 1A Rectifier****Applications**

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

**Features**

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

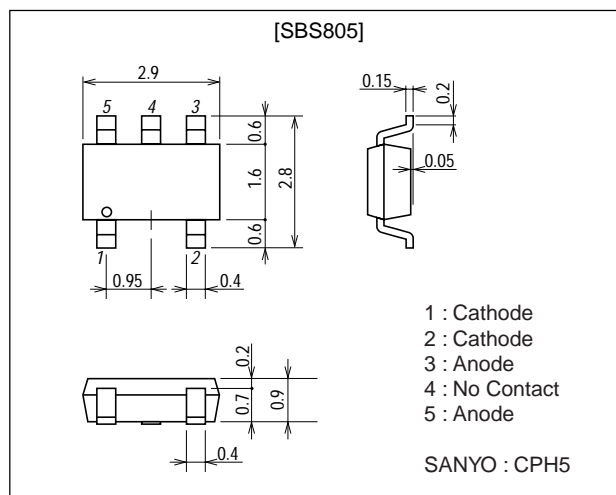
**Electrical Connection**

- 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	$V_{RRM}$		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	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

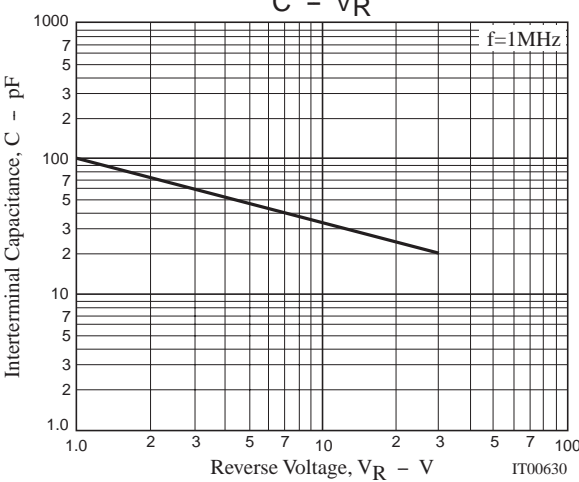
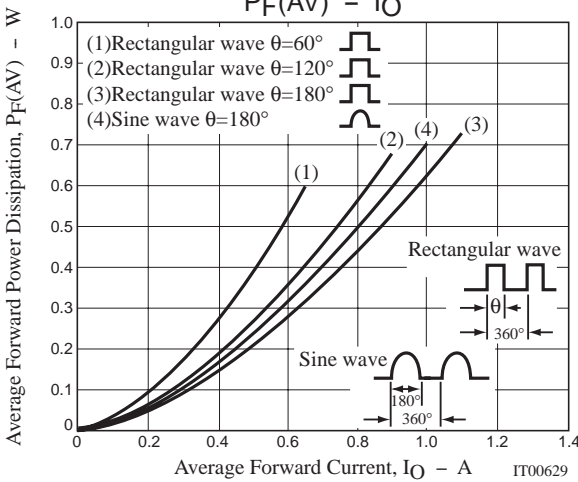
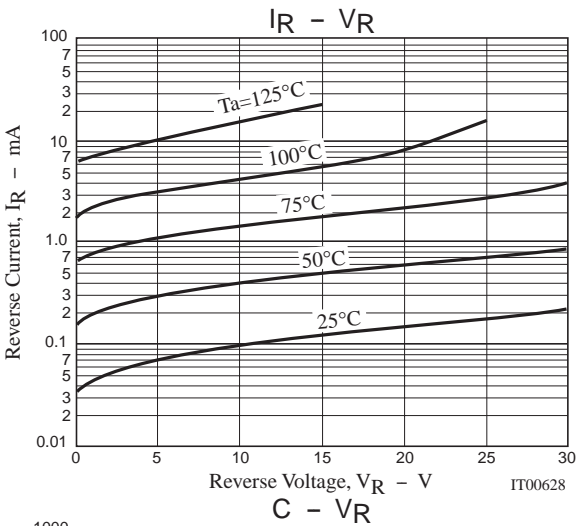
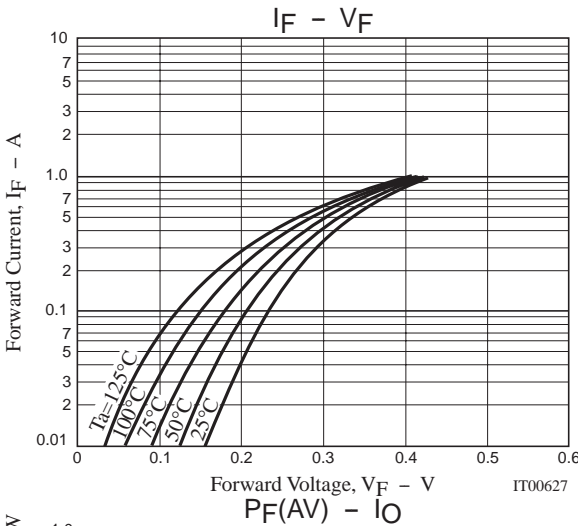
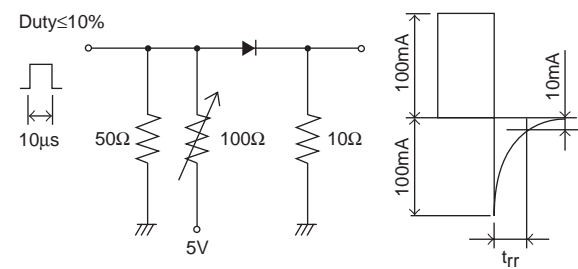
Marking : SD

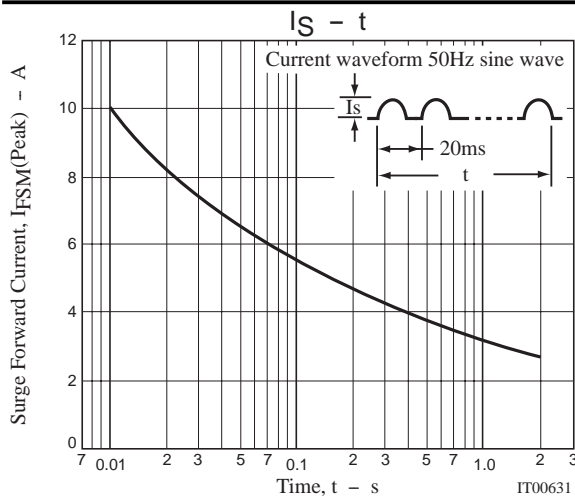
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Electrical Characteristics at Ta=25°C

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 <sup>2</sup> ×0.8mm)		110		°C/W

t<sub>rr</sub> Test Circuit





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