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SBS804 — Schottky Barrier Diode 15V, 1A Rectifier

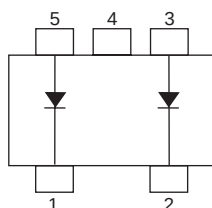
Applications

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

Features

- Low forward voltage ($I_F=0.5A$, $V_F \text{ max}=0.35V$) ($I_F=1.0A$, $V_F \text{ max}=0.4V$).
- 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 SBS804 is composed of 2 chips that are equivalent to the SBS004.

Electrical Connection

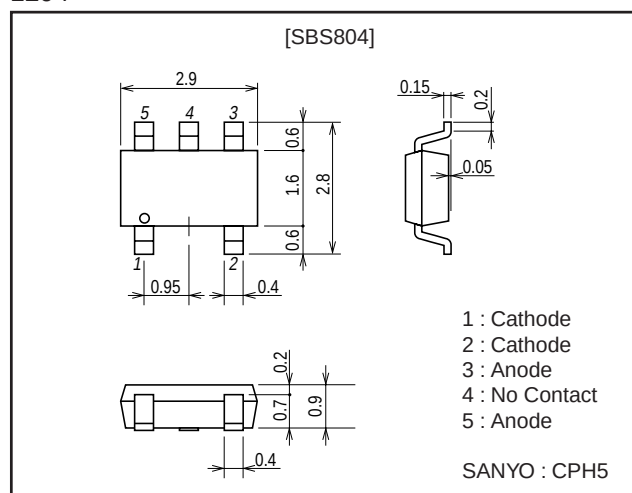


- 1 : Cathode
2 : Cathode
3 : Anode
4 : No Contact
5 : Anode

Package Dimensions

unit : mm

1294



Specifications

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

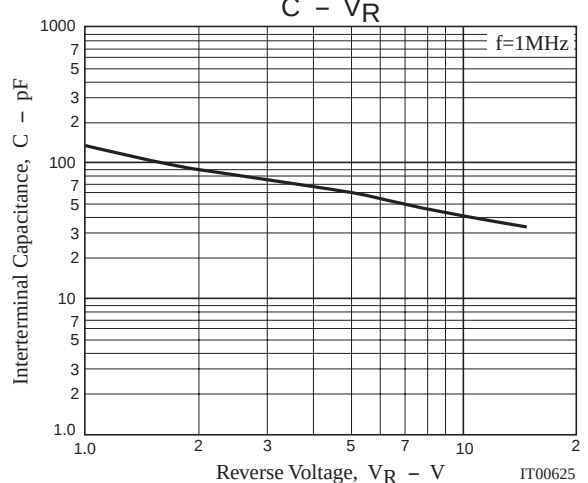
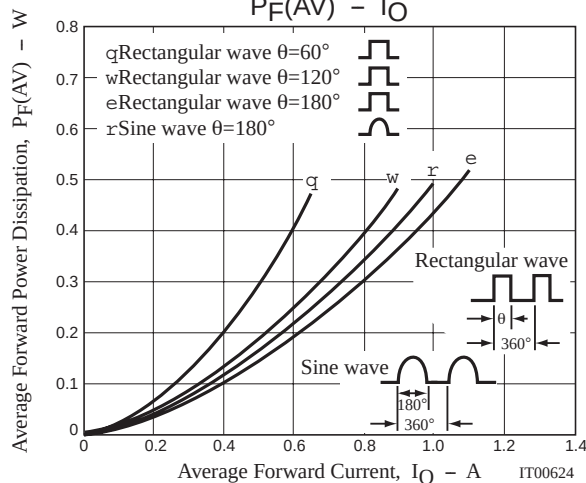
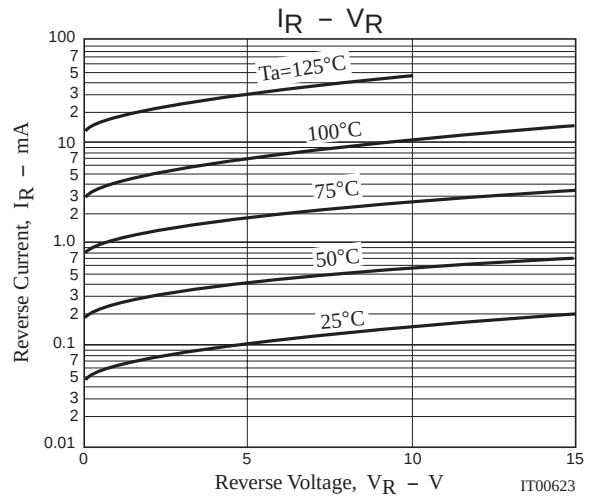
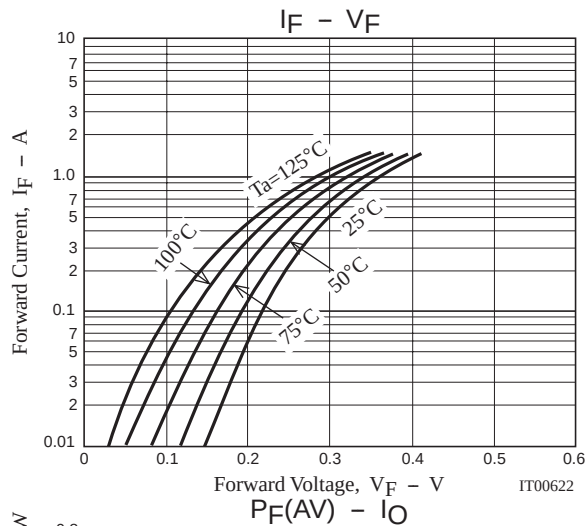
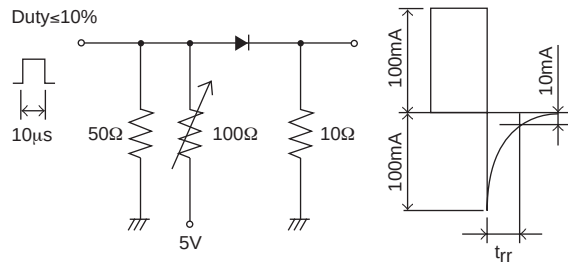
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		15	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		15	V
Average Output Current	I_O		1	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	10	A
Junction Temperature	T_j		-55 to +125	$^\circ C$
Storage Temperature	T_{stg}		-55 to +125	$^\circ C$

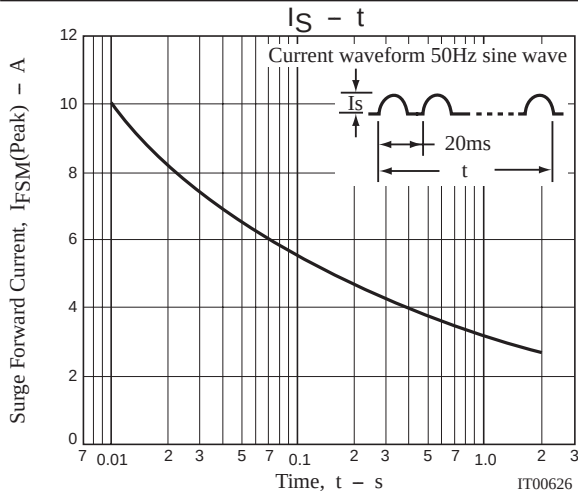
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$	15			V
Forward Voltage	V_{F1}	$I_F=0.5\text{A}$		0.30	0.35	V
	V_{F2}	$I_F=1\text{A}$		0.35	0.40	V
Reverse Current	I_R	$V_R=6\text{V}$			500	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		42		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		$^\circ\text{C/W}$

Marking : SC

Switching Time Test Circuit





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