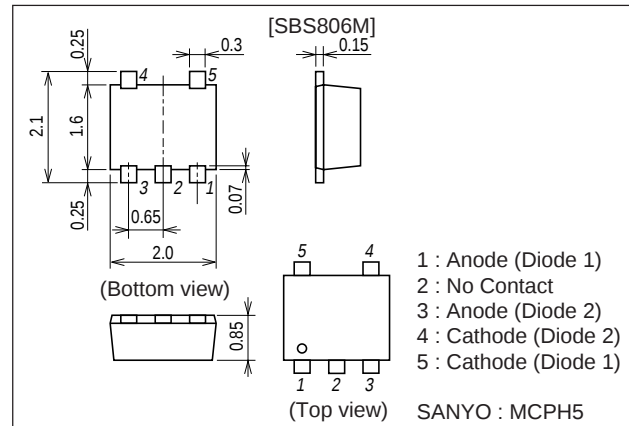


**SBS806M****30V, 0.5A Rectifier****Applications**

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

Features

- Low forward voltage ($I_F=0.3A$, $V_F \text{ max}=0.4V$) ($I_F=0.5A$, $V_F \text{ max}=0.47V$).
- Composite type with 2 low V_F SBDs in one package, facilitating high-density mounting.
- The SBS806M is composed of 2 chips that are equivalent to the SBS006.
- Ultrasmall package facilitates miniaturization in end products.

Package Dimensionsunit : mm
1310**Specifications****Absolute Maximum Ratings** at $T_a=25^\circ\text{C}$ (Value per element)

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		0.5	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 $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.5\text{mA}$	30			V
Forward Voltage	V_{F1}	$I_F=0.3A$		0.35	0.40	V
	V_{F2}	$I_F=0.5A$		0.42	0.47	V
Reverse Current	I_R	$V_R=10V$			200	μA
Interterminal Capacitance	C	$V_R=10V$, $f=1\text{MHz}$		20		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	R_{ch-a}	Mounted on a ceramic board (600mm $\times$ 0.8mm)			110	$^\circ\text{C} / W$

Marking : SA

Caution!

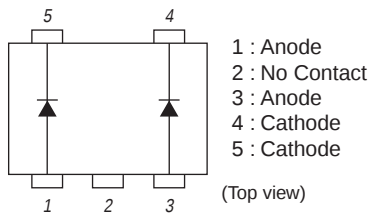
Since this device is a low- V_F SBD, the I_R is large. It is inclined to break due to thermal runaway caused by reverse loss in case of severe conditions such as high temperature / voltage. Please make a safe design taking heat dissipation into consideration.

- Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.
- SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

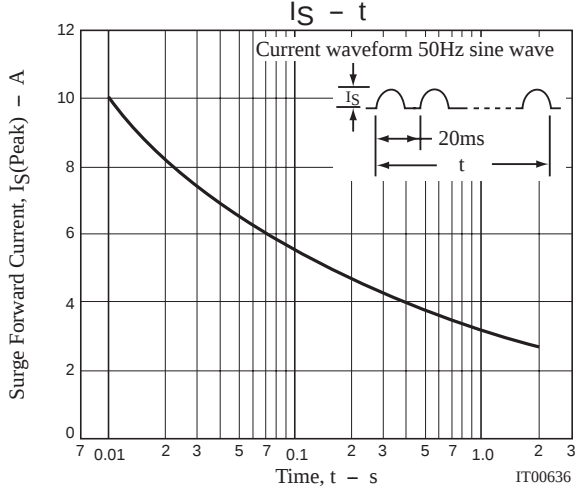
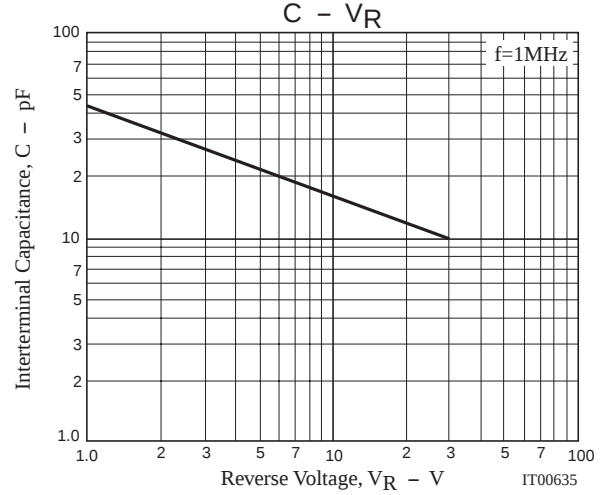
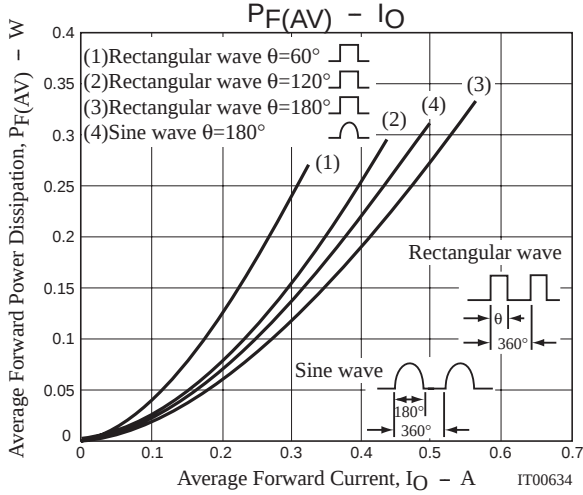
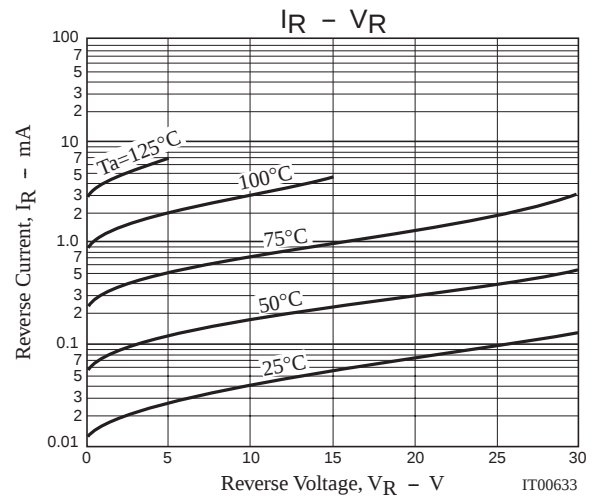
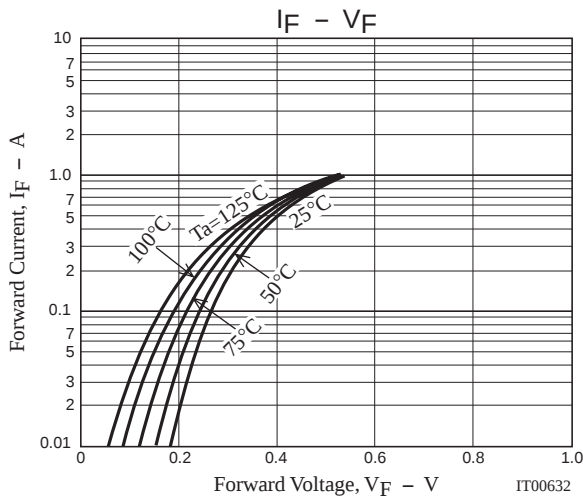
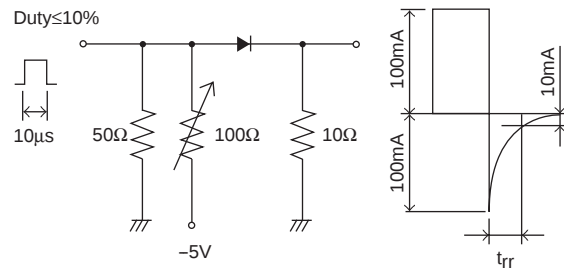
SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

73001 GI IM No.7029-1/3

Electrical Connection



t_{rr} Test Circuit



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