



SANYO Semiconductors

DATA SHEET

SB80W06T — Schottky Barrier Diode (Twin Type • Cathode Common) 60V, 8A Rectifier

Applications

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

Features

- Low forward voltage (V_F max=0.6V).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Halogen free compliance.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		60	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		66	V
Average Output Current	I_O^{*2}	50Hz resistive load, sine wave $T_c=130^\circ\text{C}$	4	A
	I_O^{*1}	50Hz resistive load, sine wave $T_c=83^\circ\text{C}$	8	A
Surge Forward Current	I _{FSM}	50Hz sine wave, 1 cycle	40	A
Junction Temperature	T _j		-55 to +150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Note) *1. Indicates the total value

*2. Value per element

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SANYO Semiconductor Co., Ltd.

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SB80W06T

Electrical Characteristics at Ta=25°C

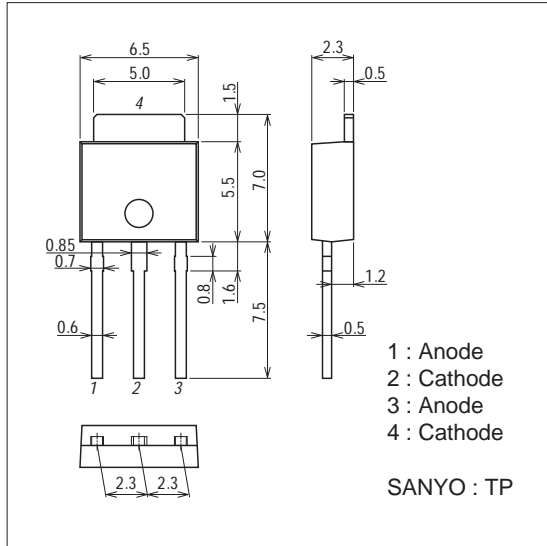
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$, $T_J=25^\circ\text{C}^*2$	60			V
Forward Voltage	V_F	$I_F=3.0\text{A}$, $T_J=25^\circ\text{C}^*2$			0.6	V
Reverse Current	I_R	$V_R=30\text{V}$, $T_J=25^\circ\text{C}^*2$			0.1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $T_J=25^\circ\text{C}^*2$		130		pF
Transient Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC		6		$^\circ\text{C} / \text{W}$

Note) *2. Value per element

Package Dimensions

unit : mm (typ)

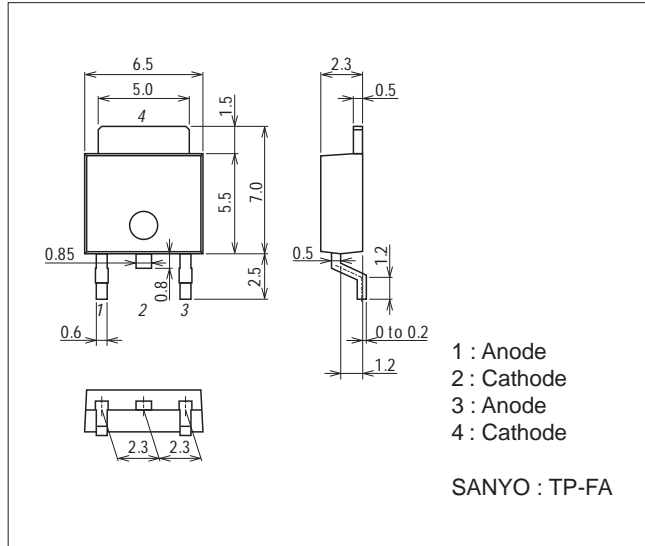
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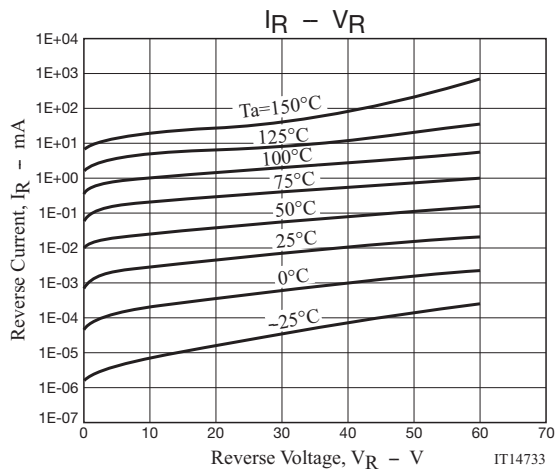
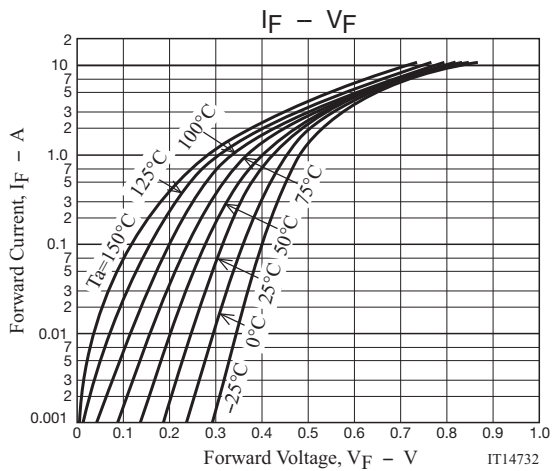
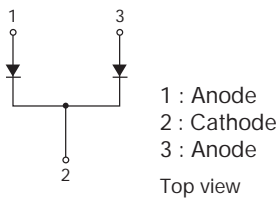
Package Dimensions

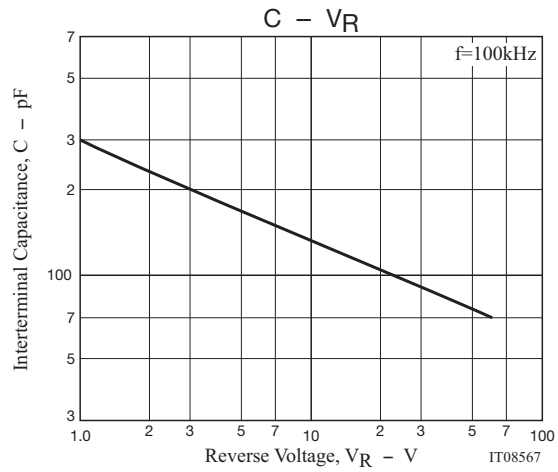
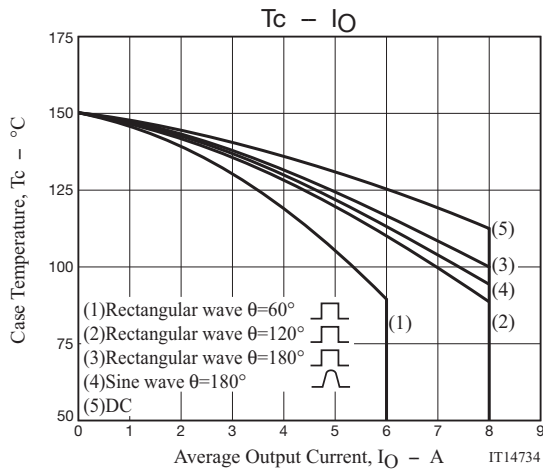
unit : mm (typ)

7003-002



Electrical Connection





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