



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## 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	$V_{RRM}$		60	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		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	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

Note) \*1. Indicates the total value

\*2. Value per element

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# SB80W06T

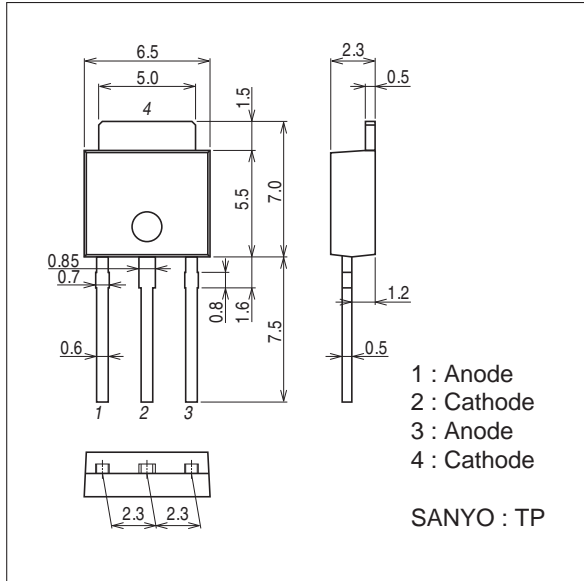
## Electrical Characteristics at Ta=25°C

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	$R_{th(j-c)}$	Junction-Case : Smoothed DC		6		$^\circ\text{C} / \text{W}$

Note) \*2. Value per element

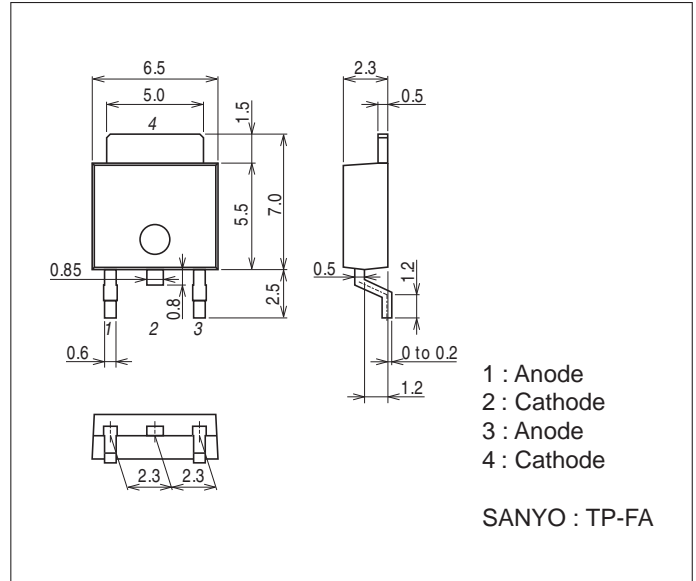
### Package Dimensions

unit : mm (typ)  
7518-001

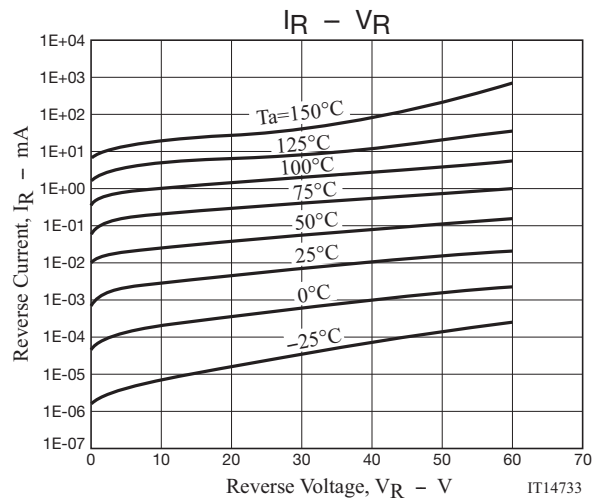
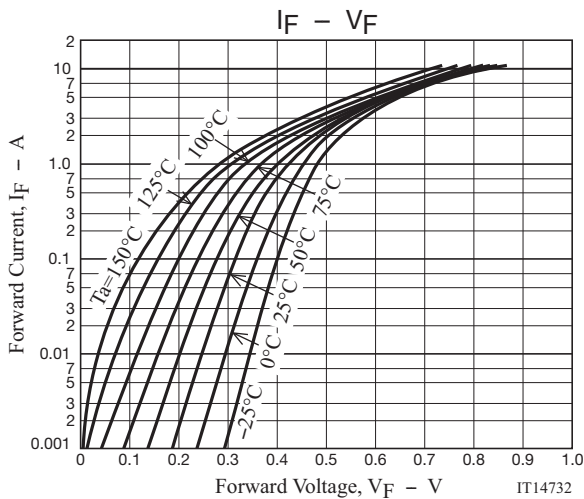
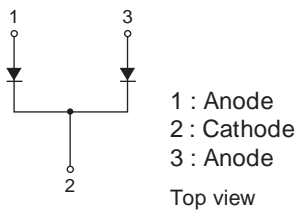


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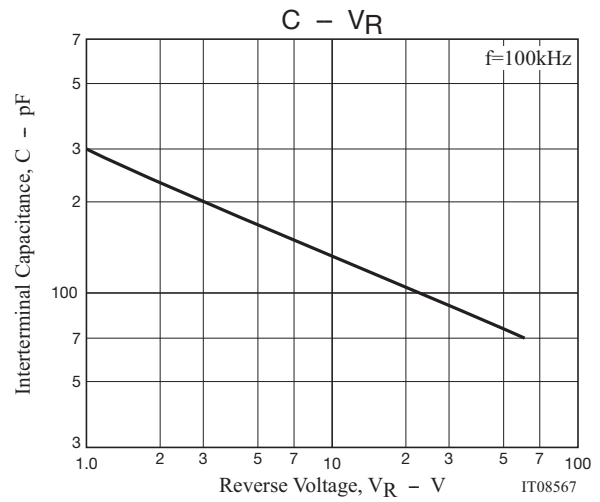
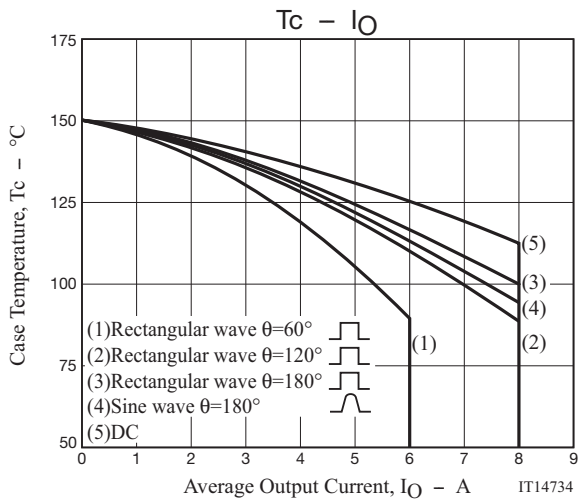
unit : mm (typ)  
7003-002



### Electrical Connection



# SB80W06T



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