



SANYO Semiconductors

DATA SHEET

SBT80-04Y — Schottky Barrier Diode (Twin Type · Cathode Common)

40V, 8A Rectifier

Applications

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

Features

- Guaranteed up to $T_j=150^{\circ}\text{C}$.
- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Surface mount type device reducing the assembling time and facilitating compact and high-density assembly of SBT80-04Y-applied equipment.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		40	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		44	V
Average Output Current	I_O	50Hz resistive load, Sine wave $T_c=116^{\circ}\text{C}$	8	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	80	A
Junction Temperature	T_j		-55 to +150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$, $T_j=25^{\circ}\text{C}^*$	40			V
Forward Voltage	V_F	$I_F=3\text{A}$, $T_j=25^{\circ}\text{C}^*$			0.55	V
Reverse Current	I_R	$V_R=20\text{V}$, $T_j=25^{\circ}\text{C}^*$			0.1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $T_j=25^{\circ}\text{C}^*$		160		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			4.0	$^{\circ}\text{C} / \text{W}$

Note) * : Value per element

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■ 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.

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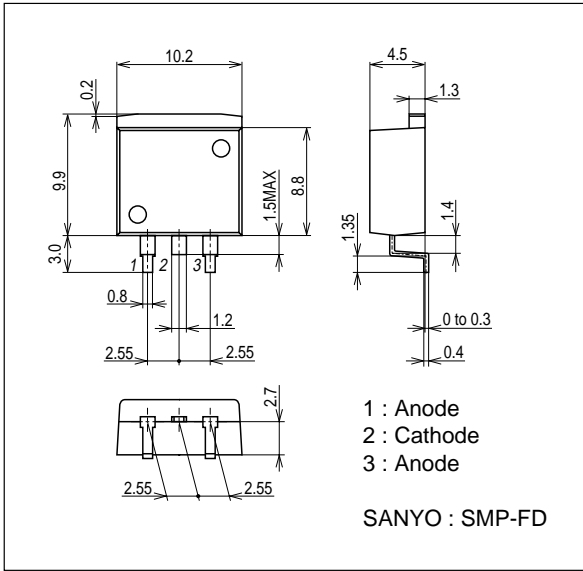
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SBT80-04Y

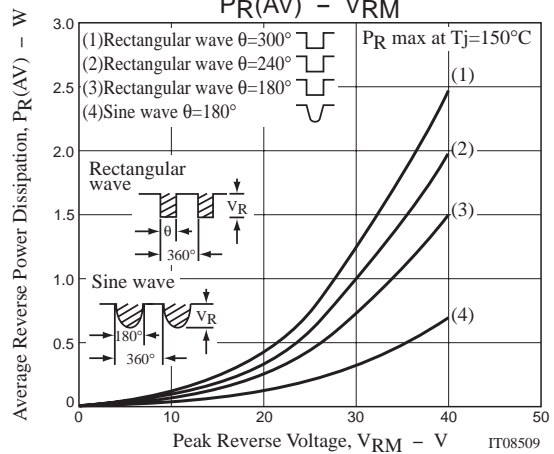
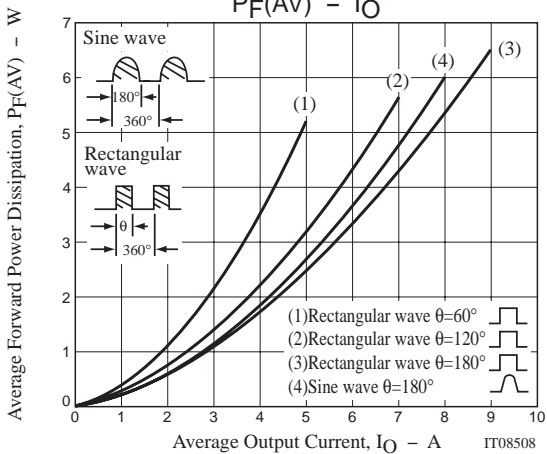
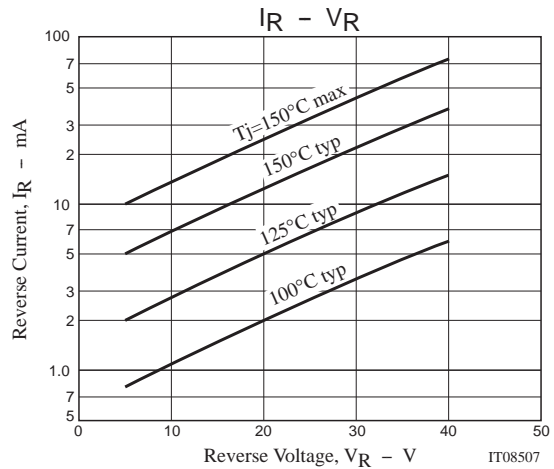
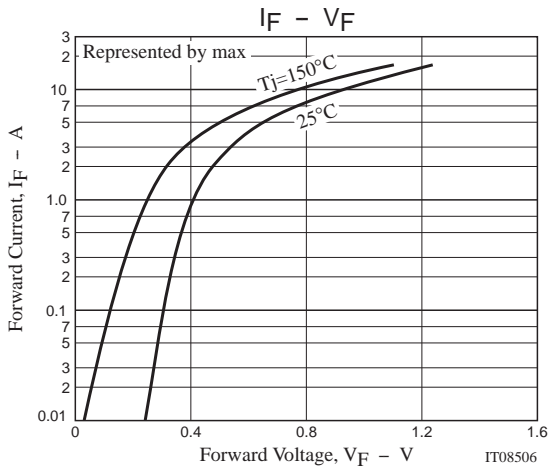
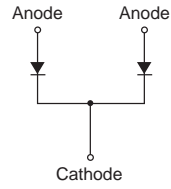
Package Dimensions

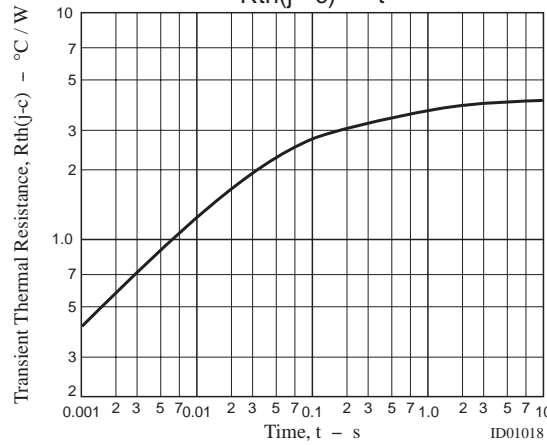
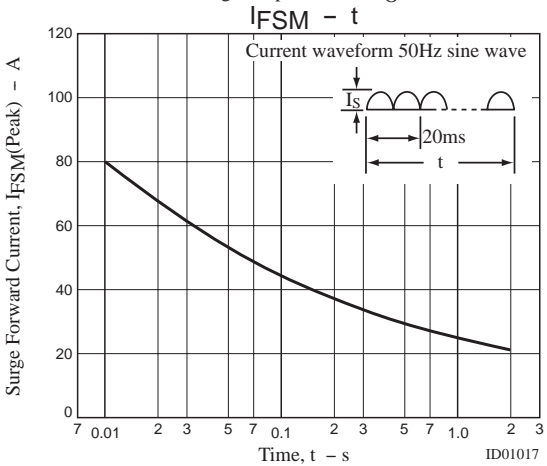
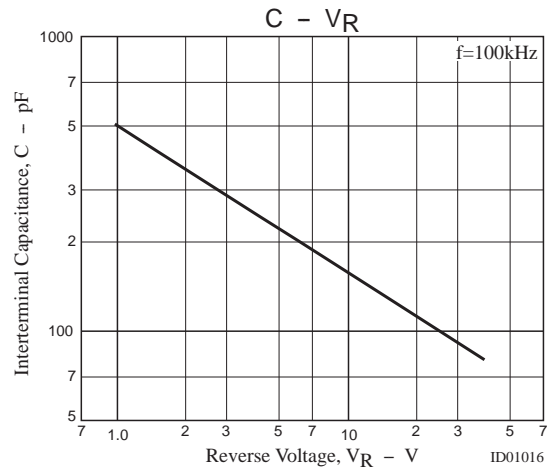
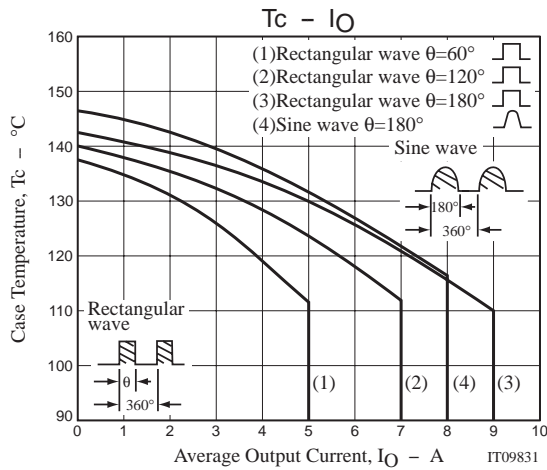
unit : mm

7001-001



Electrical Connection





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