



SANYO Semiconductors

DATA SHEET

SBT80-10Y — Schottky Barrier Diode (Twin Type · Cathode Common)

100V, 8A Rectifier

Applications

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

Features

- Guaranteed up to $T_j=150^{\circ}\text{C}$.
- Low forward voltage ($V_F \text{ max}=0.80\text{V}$).
- 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 SBT80-10Y-applied equipment.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		100	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		105	V
Average Output Current	I_O	50Hz resistive load, Sine wave $T_c=95^{\circ}\text{C}$	8	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	60	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	$I_R=1\text{mA}$, $T_j=25^{\circ}\text{C}^*$	100			V
Forward Voltage	V_F	$I_F=3\text{A}$, $T_j=25^{\circ}\text{C}^*$			0.8	V
Reverse Current	I_R	$V_R=50\text{V}$, $T_j=25^{\circ}\text{C}^*$			0.1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $T_j=25^{\circ}\text{C}^*$		90		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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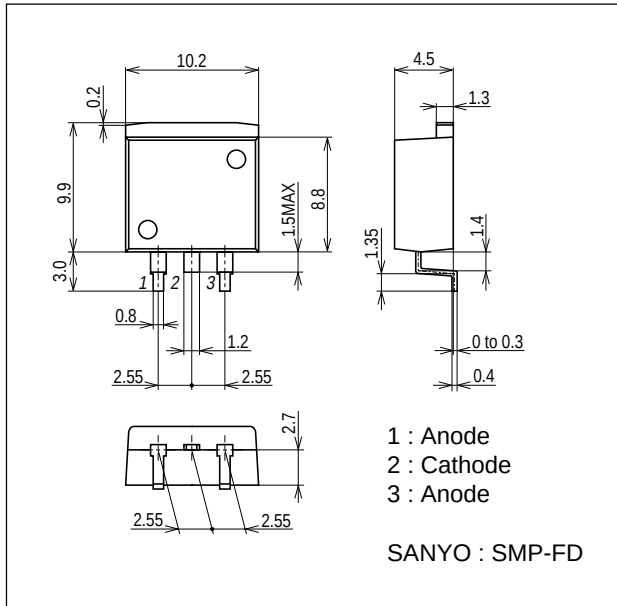
SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

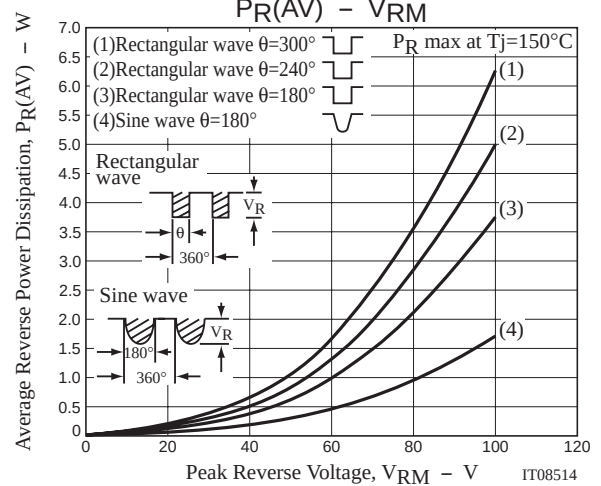
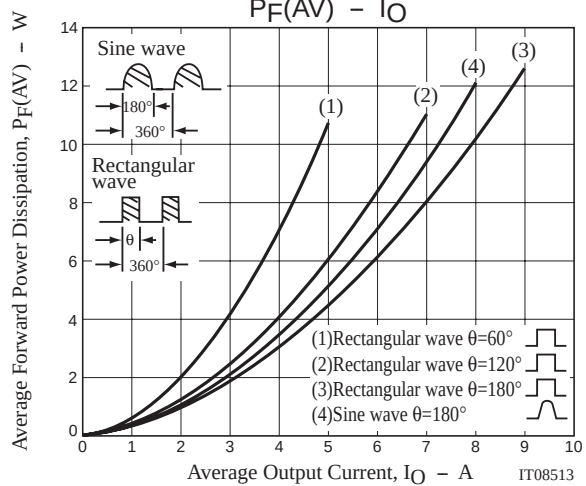
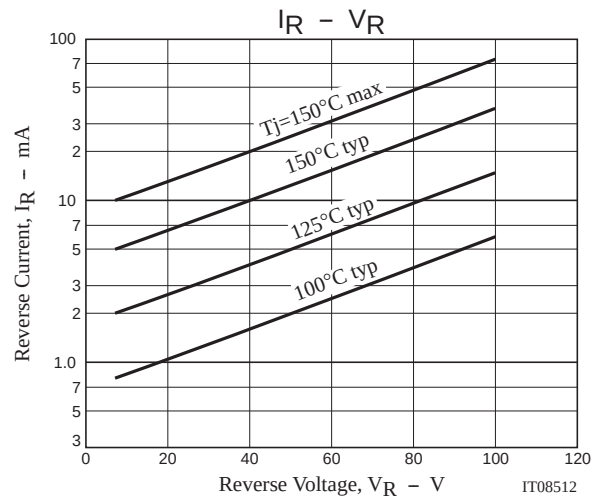
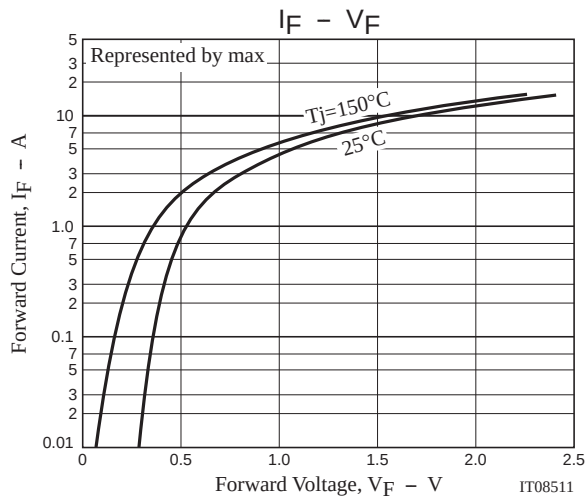
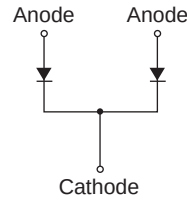
Package Dimensions

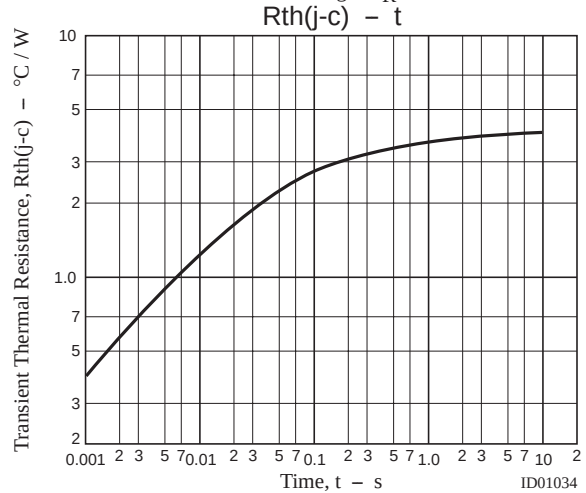
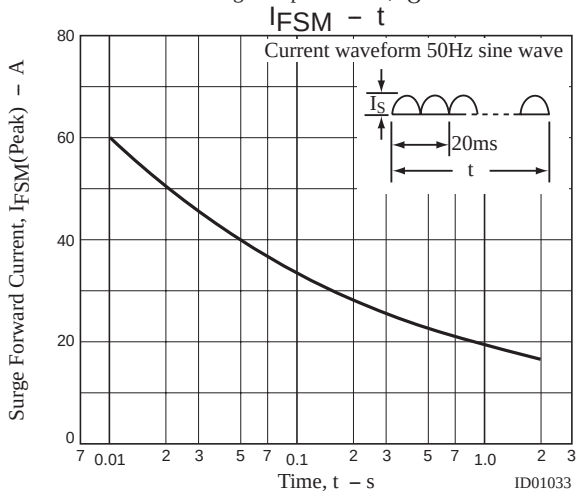
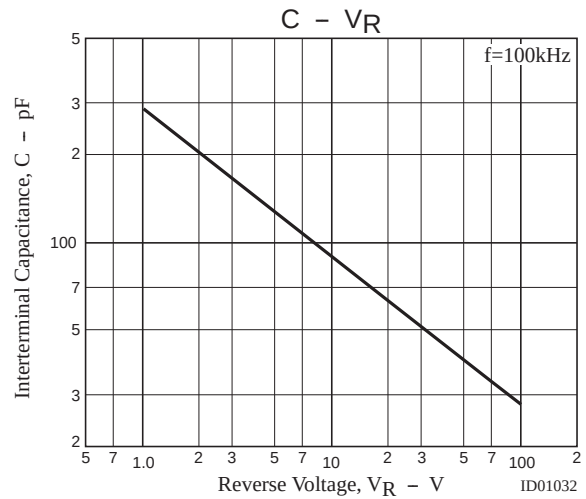
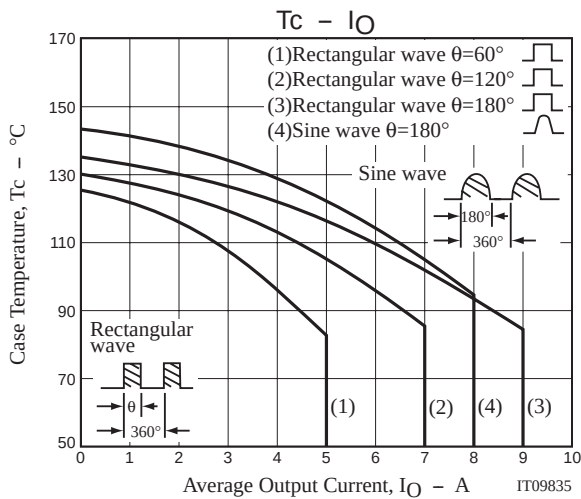
unit : mm

7001-001



Electrical Connection





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