



SANYO Semiconductors

DATA SHEET

SBT80-04J

 — Schottky Barrier Diode (Twin Type · Cathode Common)

40V, 8A Rectifier

Applications

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

Features

- Guaranteed up to $T_j=150^\circ\text{C}$.
- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Short reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Attachment workability is good by Mica-less package.

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 $T_c=117^\circ\text{C}$	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	$I_F=3.0\text{A}$, $T_j=25^\circ\text{C}^*$			0.55	V
Reverse Current	I_R	$V_R=20\text{V}$, $T_j=25^\circ\text{C}^*$			0.1	mA

Note) * : Value per element

Continued on next page.

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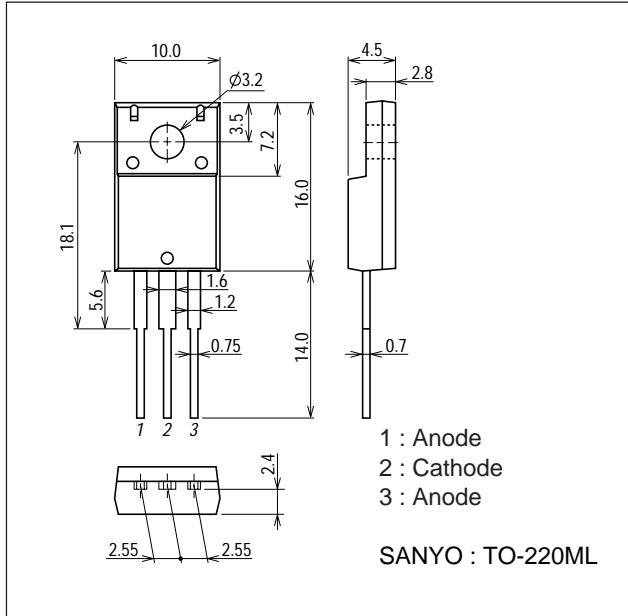
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=10V, T_j=25^\circ C^*$		160		pF
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			5.0	$^\circ C / W$

Note) *: Value per element

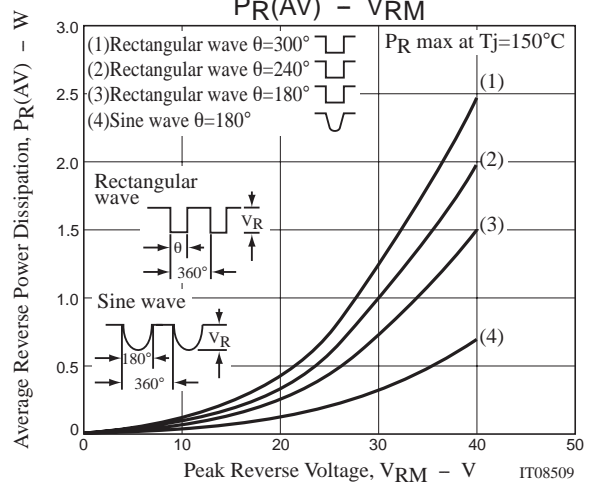
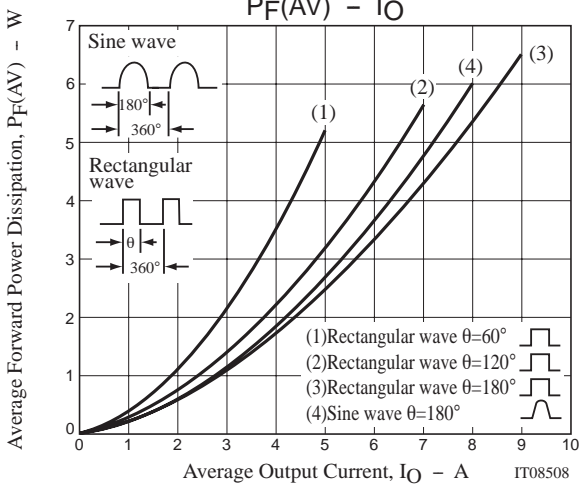
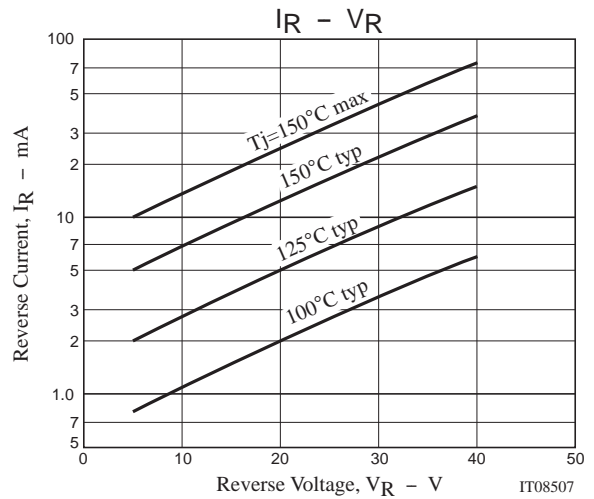
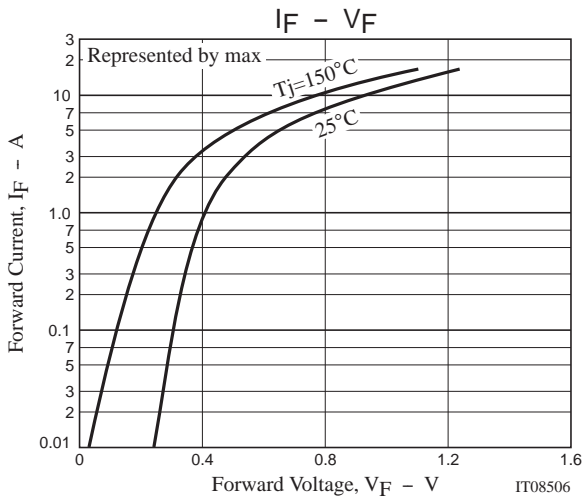
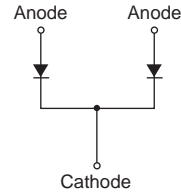
Package Dimensions

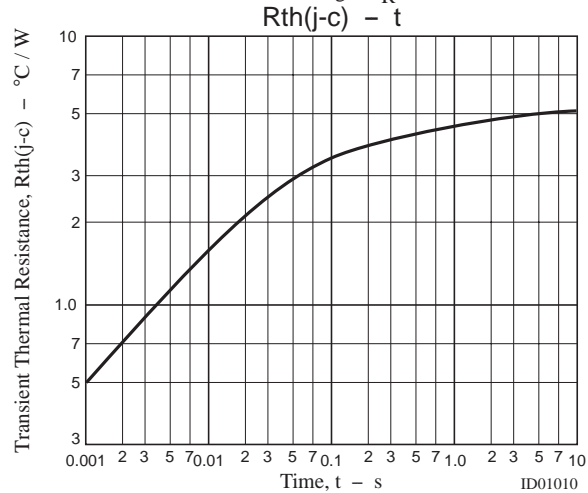
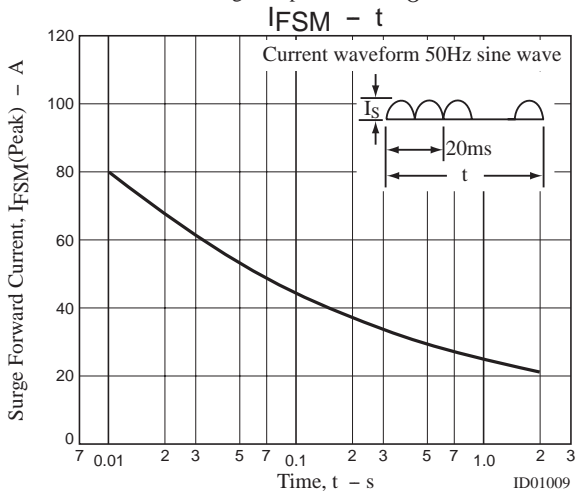
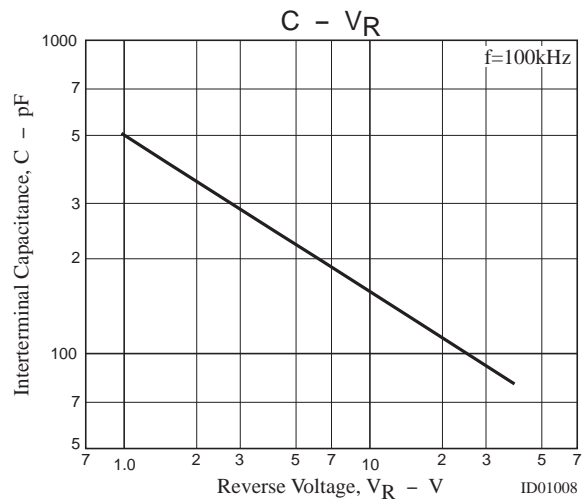
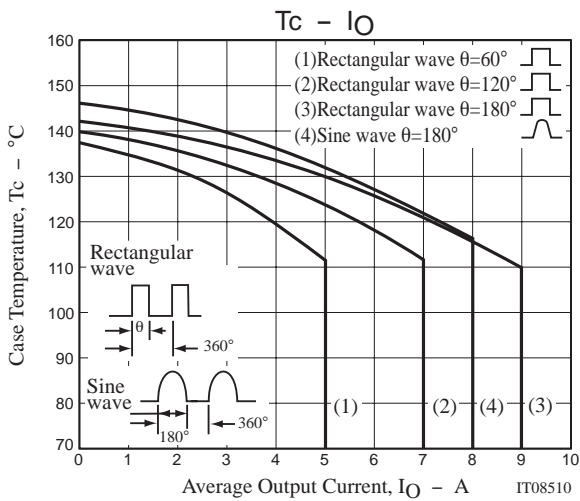
unit : mm (typ)

7508-001



Electrical Connection





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