



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## 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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<http://semicon.sanyo.com/en/network>

# SBT80-04J

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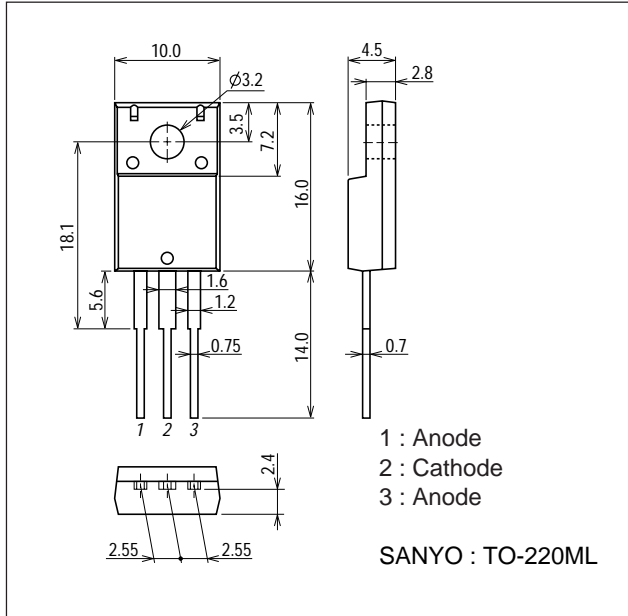
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=10V, T_j=25^\circ C^*$		160		pF
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			5.0	$^\circ C / W$

Note) \*: Value per element

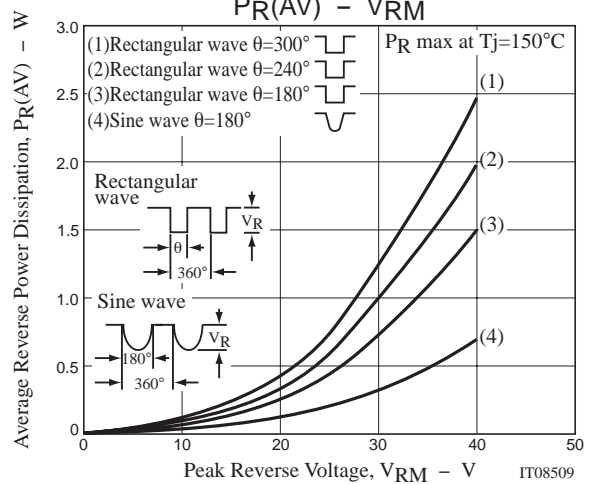
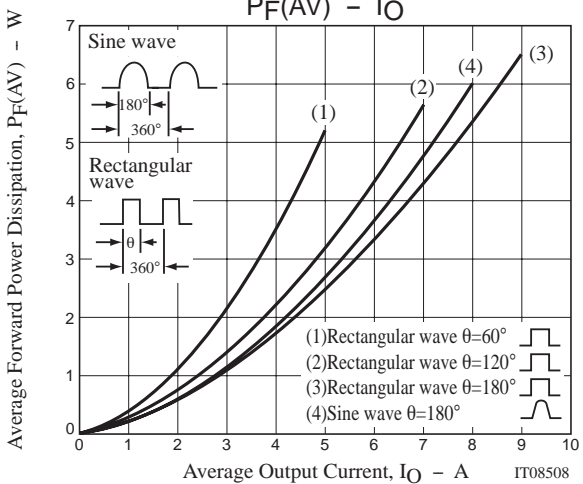
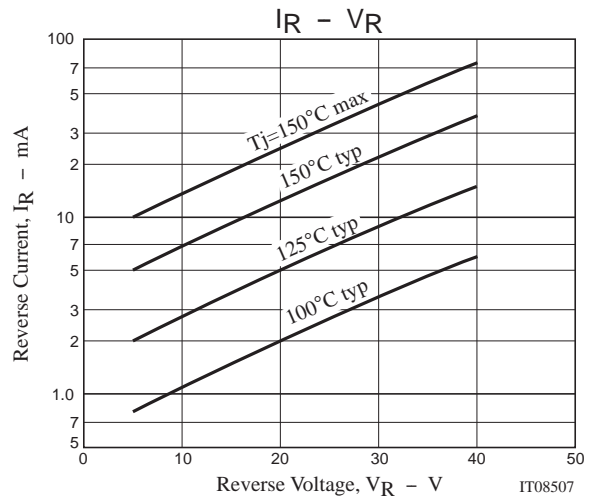
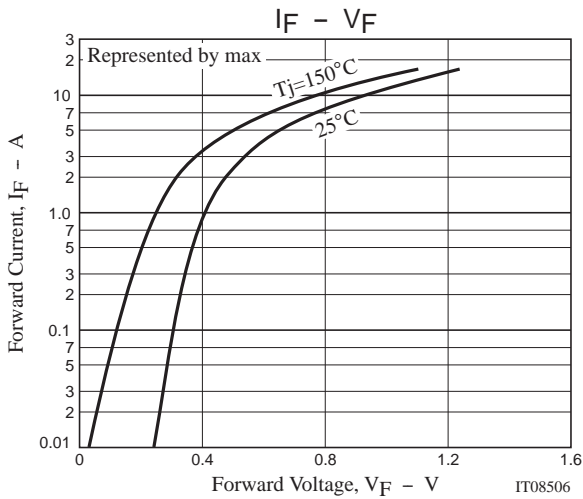
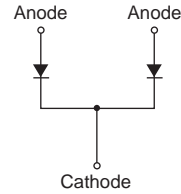
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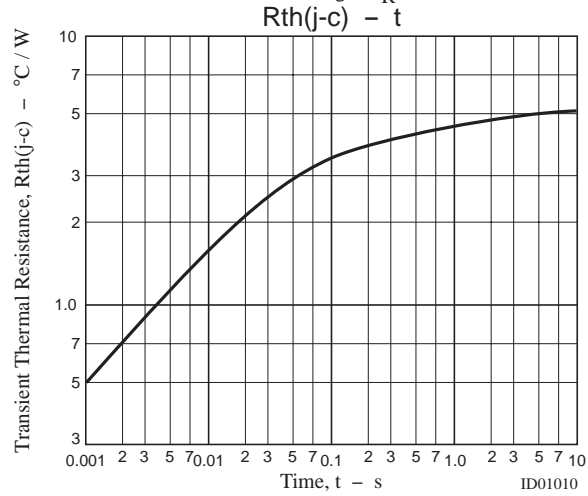
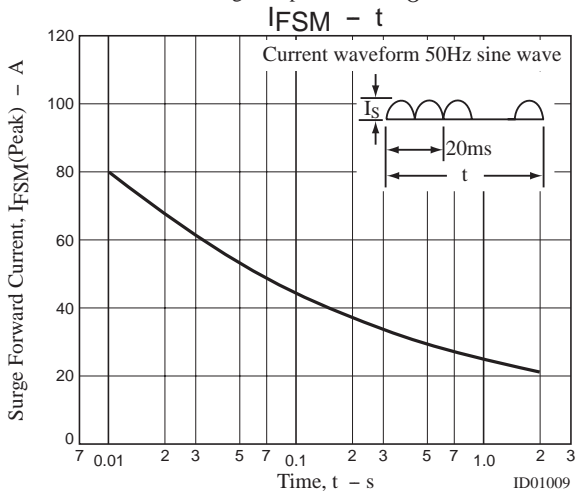
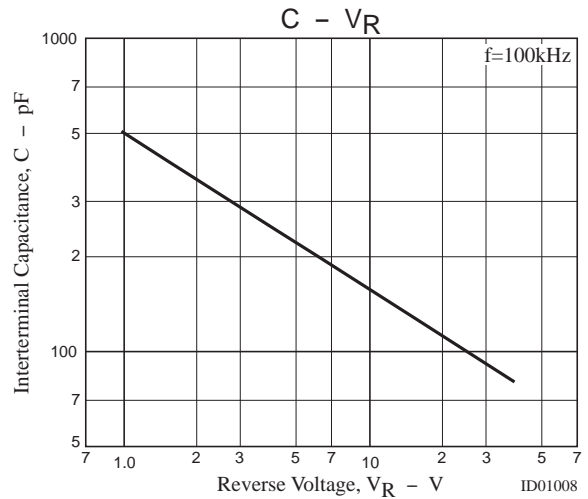
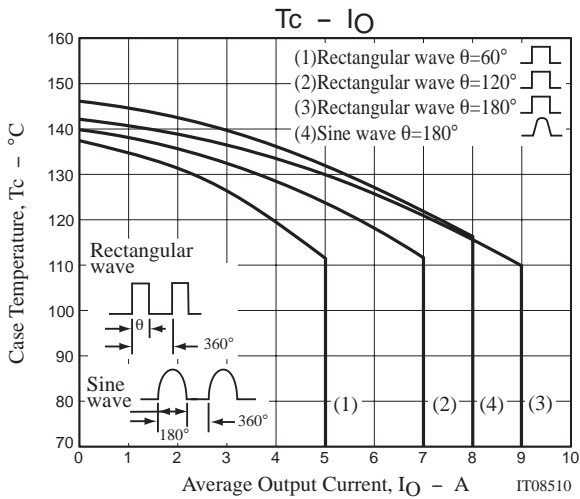
unit : mm (typ)

7508-001



## Electrical Connection





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