



SANYO Semiconductors

## DATA SHEET

# SBJ100-04J

 — Schottky Barrier Diode (Twin Type · Cathode Common)  
**40V, 10A Rectifier**

## Applications

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

## Features

- Small reverse current ( $I_R$  typ=5 $\mu$ A) due to adoption of JBS (junction barrier schottky) structure.
- Low forward voltage ( $V_F$  typ=0.48V).
- High temperature operation is possible ( $T_J$ =150°C).
- High surge breakdown voltage.

## 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 $T_c=117^\circ\text{C}$	10	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	100	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	$V_R$	$I_R=2\text{mA}$ , $T_J=25^\circ\text{C}^*$	40			V
Forward Voltage	$V_F$	$I_F=5\text{A}$ , $T_J=25^\circ\text{C}^*$		0.48	0.54	V
Reverse Current	$I_R$	$V_R=20\text{V}$ , $T_J=25^\circ\text{C}^*$		5	50	$\mu\text{A}$
		$V_R=40\text{V}$ , $T_J=25^\circ\text{C}^*$		8	100	$\mu\text{A}$
Interterminal Capacitance	$C$	$V_R=10\text{V}$ , $T_J=25^\circ\text{C}^*$		250		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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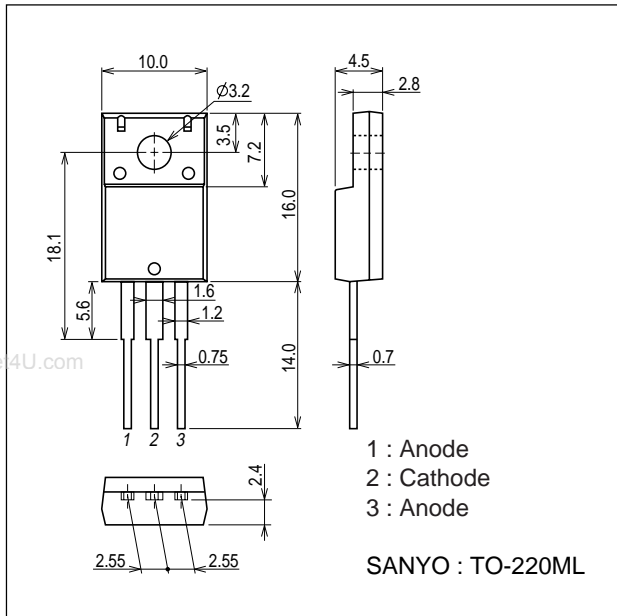
**SANYO Electric Co., Ltd. Semiconductor Company**

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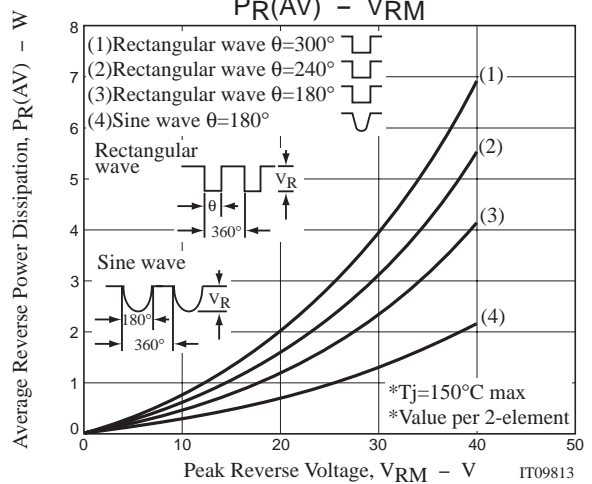
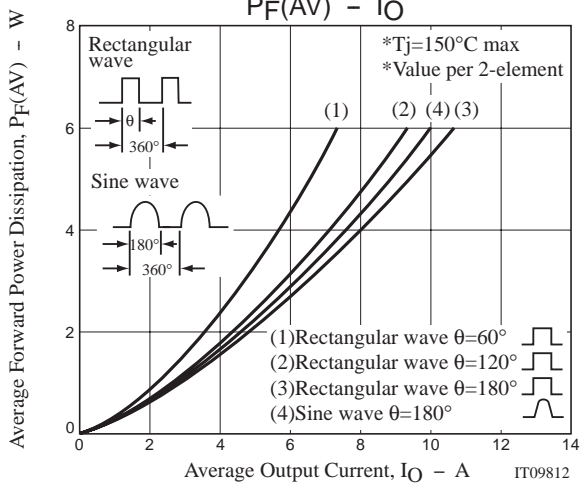
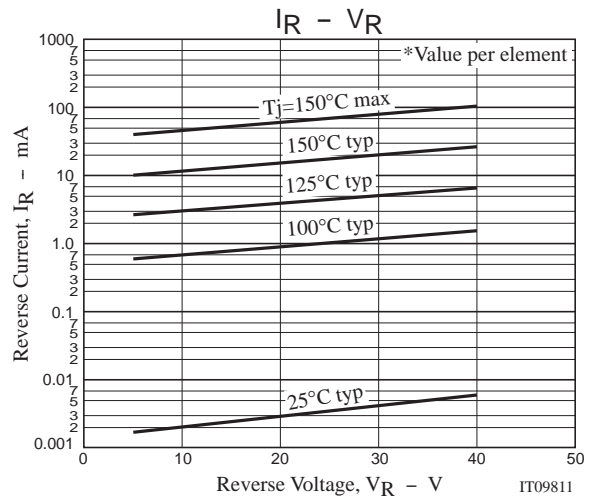
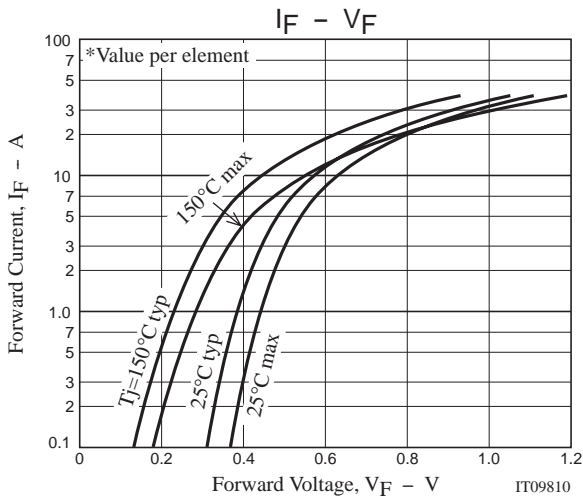
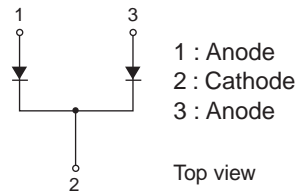
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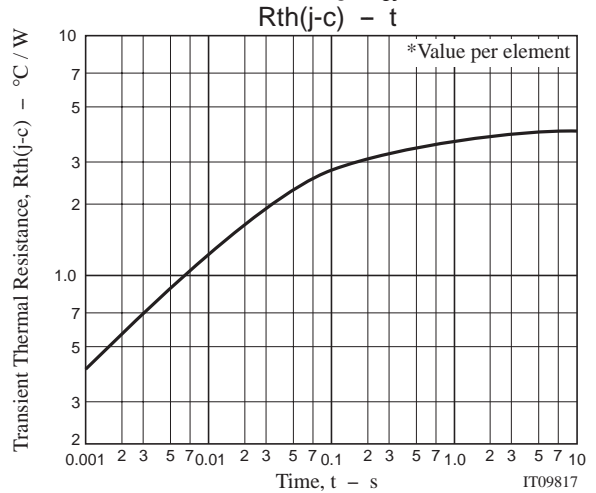
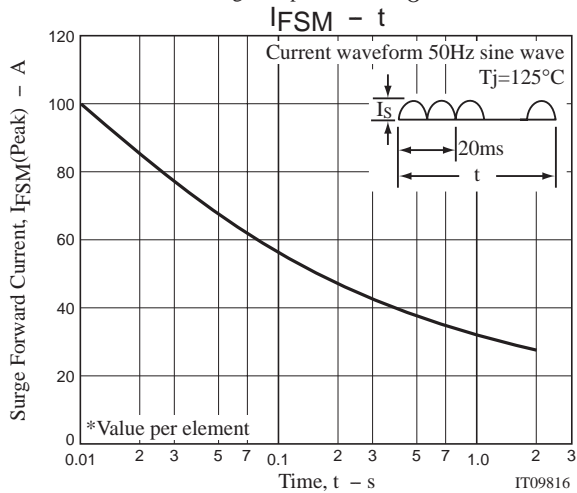
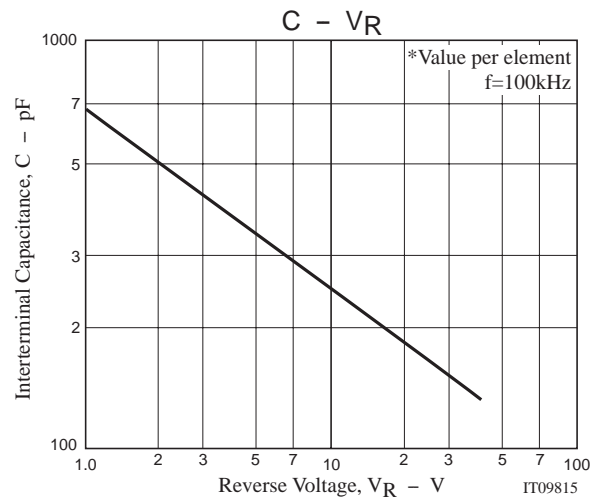
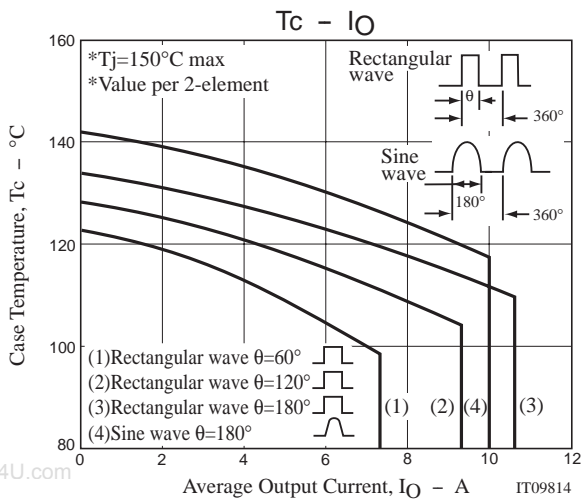
## Package Dimensions

unit : mm  
7508-001



## Electrical Connection





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