



SANYO Semiconductors

## DATA SHEET

# SBR50-16JS

 — Schottky Barrier Diode (Twin Type · Cathode Common)  
**160V, 5A Rectifier**

## Applications

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

## Features

- $T_j=150^{\circ}\text{C}$ .
- Low forward voltage ( $V_F \text{ max}=0.80\text{V}$ ).
- Short reverse recovery time.
- Low switching noise.
- High reliability due to 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	$V_{RRM}$		160	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		165	V
Average Output Current	$I_O$	50Hz resistive load, Sine wave $T_c=128^{\circ}\text{C}$	5	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	$V_R$	$I_R=1\text{mA}$ , $T_j=25^{\circ}\text{C}^*$	160			V
Forward Voltage	$V_F$	$I_F=2.5\text{A}$ , $T_j=25^{\circ}\text{C}^*$		0.77	0.80	V
Reverse Current	$I_R$	$V_R=160\text{V}$ , $T_j=25^{\circ}\text{C}^*$		2.5	50	$\mu\text{A}$

Note) \* : Value per element

Continued on next page.

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**SANYO Semiconductor Co., Ltd.**

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# SBR50-16JS

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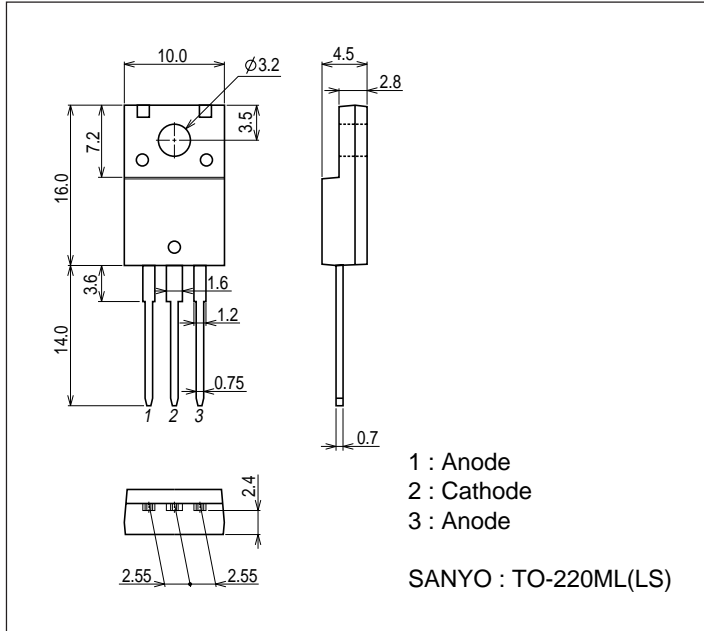
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=10V, T_j=25^\circ C^*$		48		pF
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			5.0	$^\circ C / W$

Note) \*: Value per element

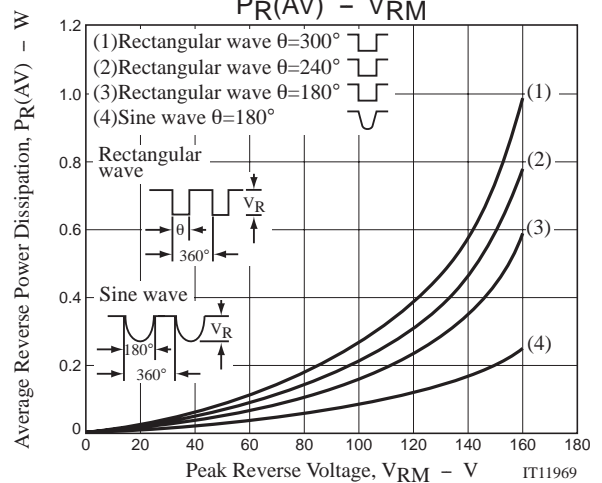
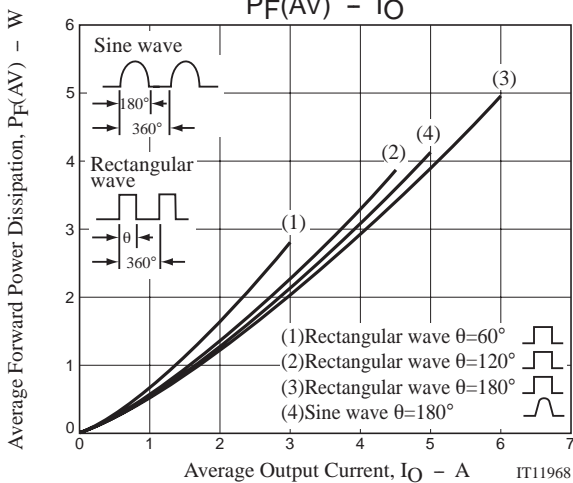
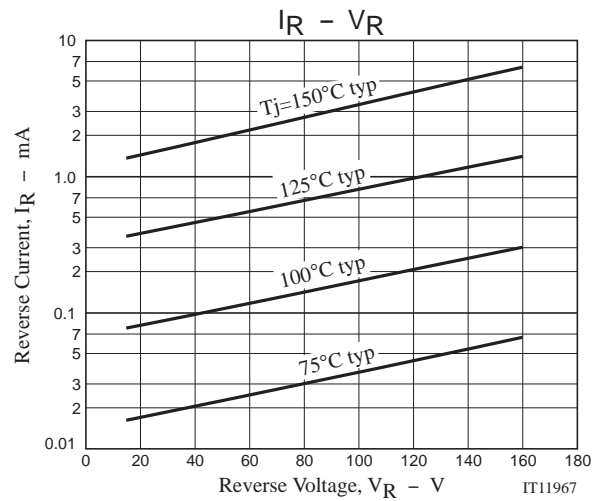
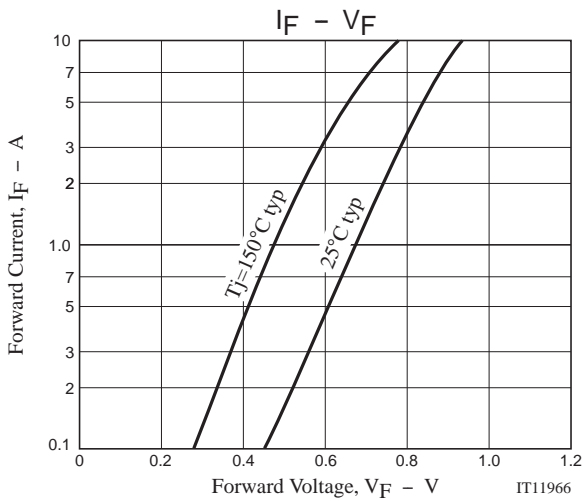
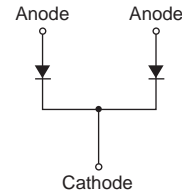
## Package Dimensions

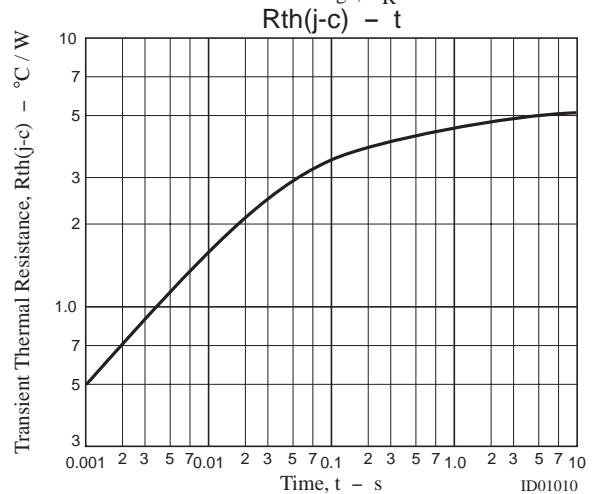
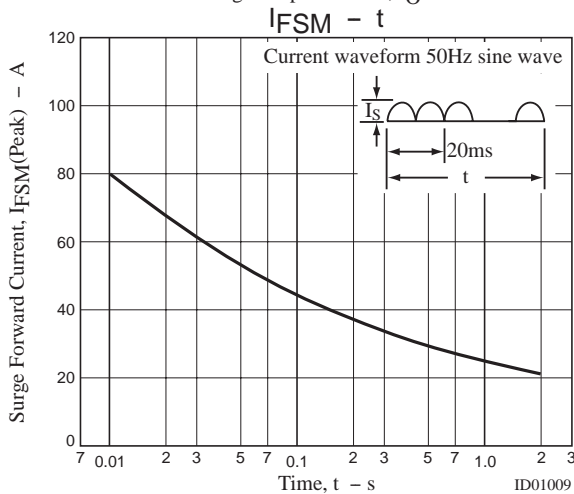
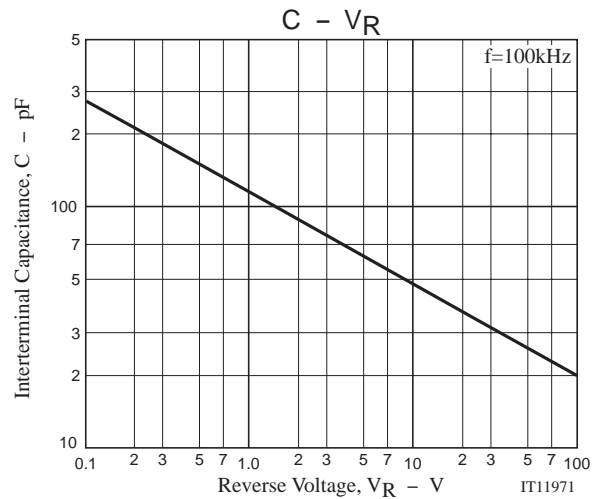
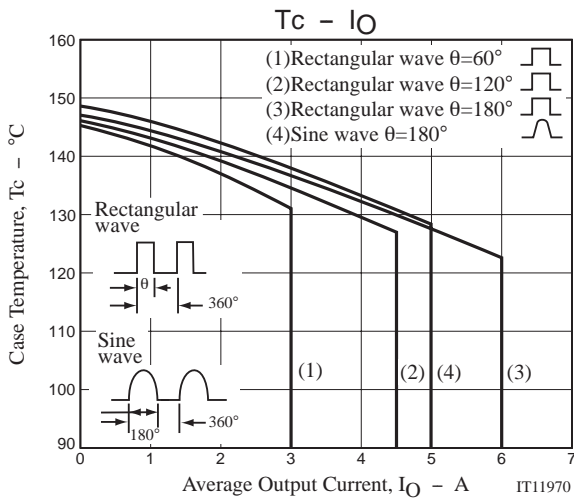
unit : mm (typ)

7525-001



## Electrical Connection





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