



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

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	μA

Note) * : Value per element

Continued on next page.

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SBR50-16JS

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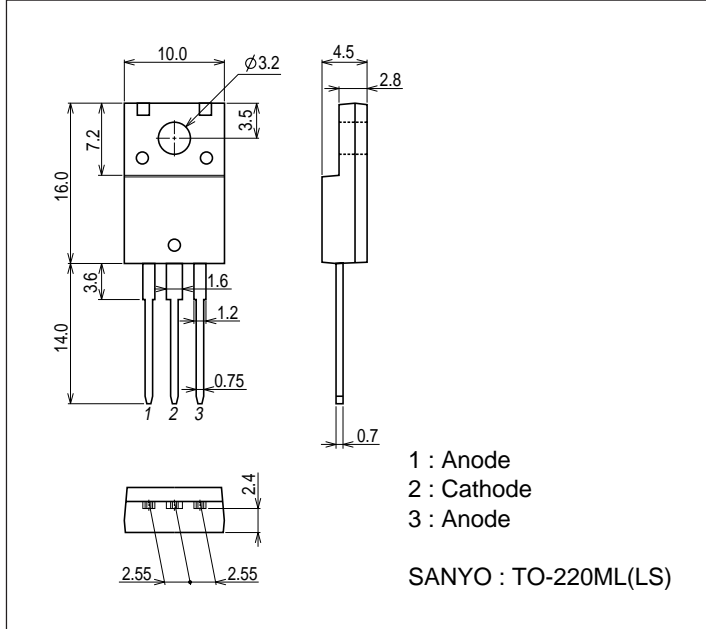
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=10V, T_j=25^\circ C^*$		48		pF
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			5.0	$^\circ C / W$

Note) *: Value per element

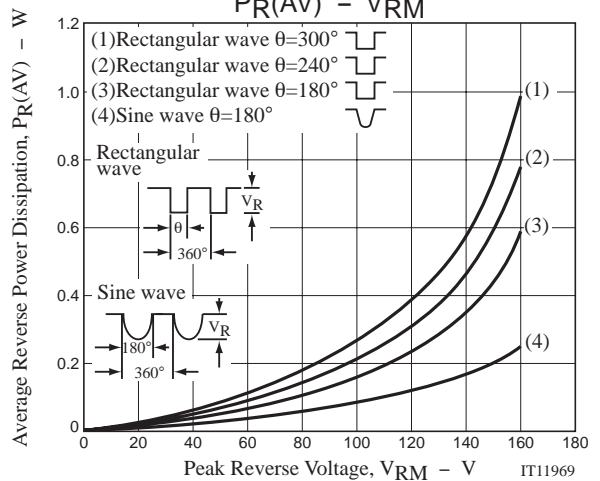
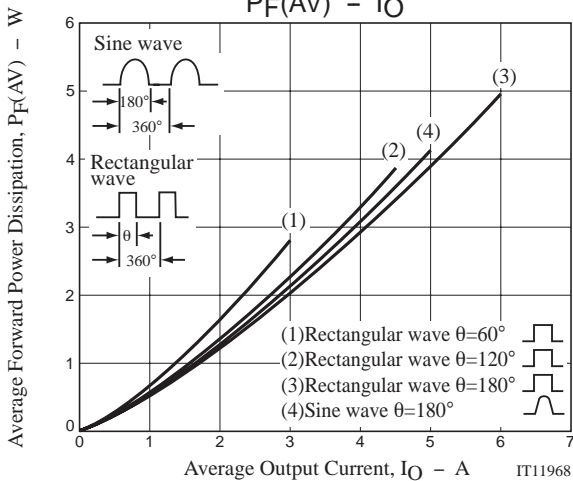
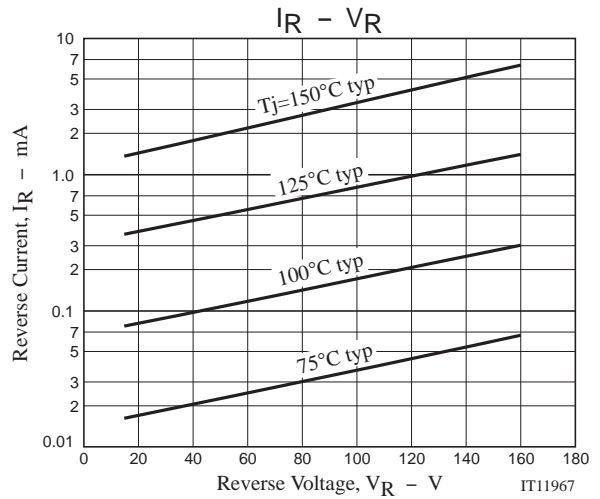
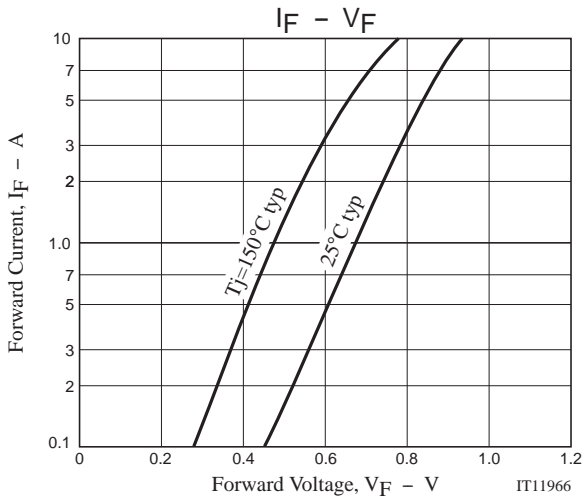
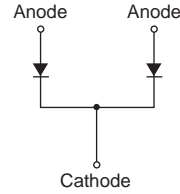
Package Dimensions

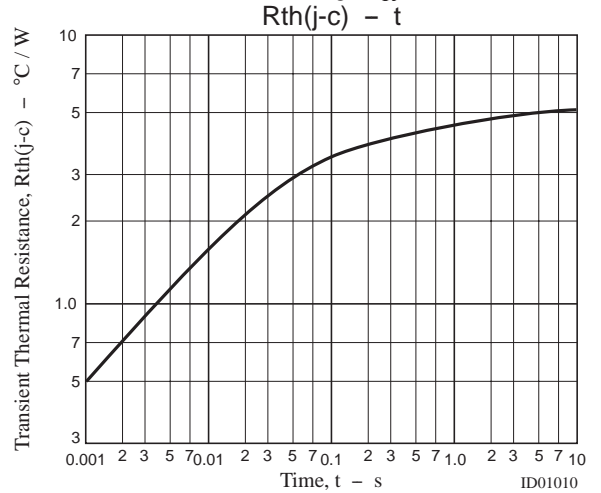
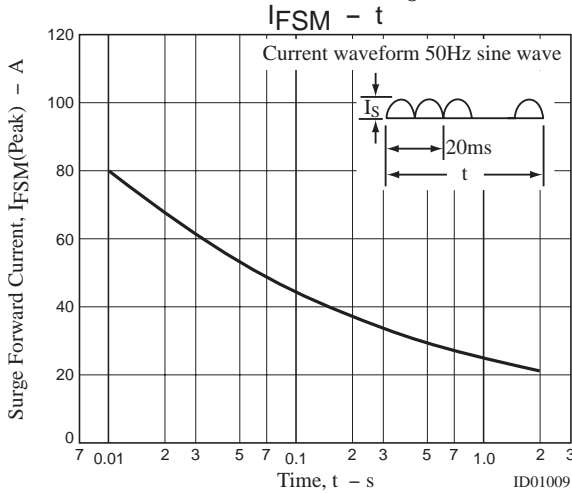
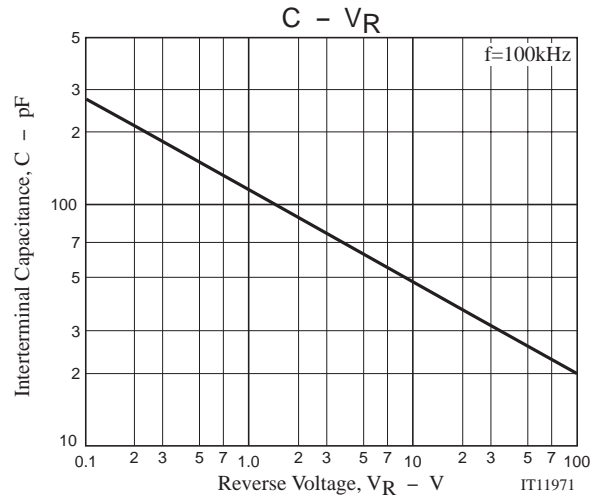
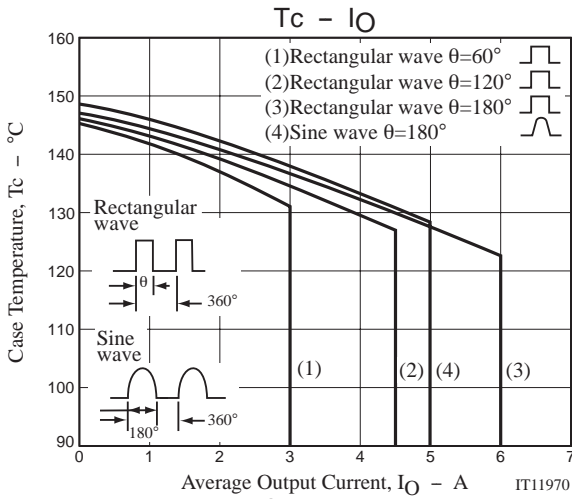
unit : mm (typ)

7525-001



Electrical Connection





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