



SANYO Semiconductors

DATA SHEET

SB10-05P

Schottky Barrier Diode
50V, 1A Rectifier

Applications

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

Features

- Low forward voltage (V_F max=0.55V).
- Short reverse recovery time (t_{rr} max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to reliable planar structure.

Specifications

Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings		Unit
Repetitive Peak Reverse Voltage	V_{RRM}			50	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}			55	V
Average Output Current	I_O			1	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle		10	A
Junction Temperature	T_j			-55 to +125	$^\circ C$
Storage Temperature	T_{stg}			-55 to +125	$^\circ C$

Electrical Characteristics at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu A$	50			V
Forward Voltage	V_F	$I_F=1A$			0.55	V
Reverse Current	I_R	$V_R=25V$			80	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$			52	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit			10	ns

Marking : SA

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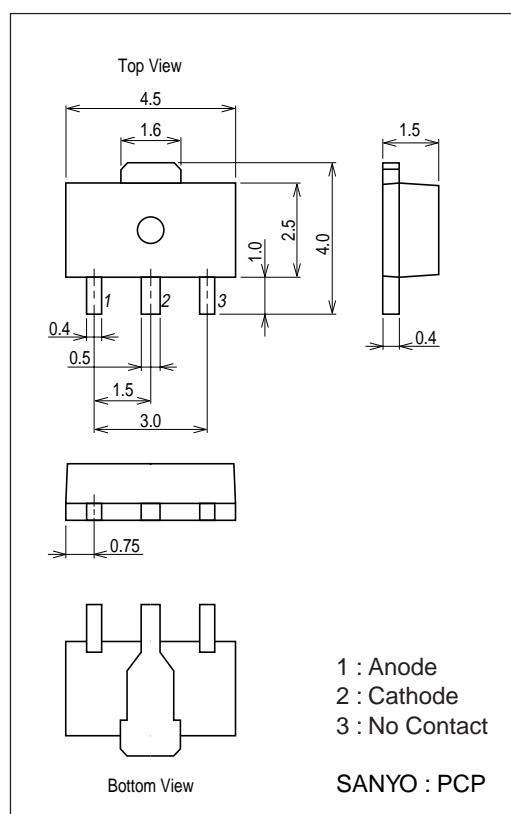
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Thermal Resistance	R _{thj-a} (1)				300	°C / W
	R _{thj-a} (2)	Mounted on a ceramic board (250mm ² ×0.8mm)			110	°C / W

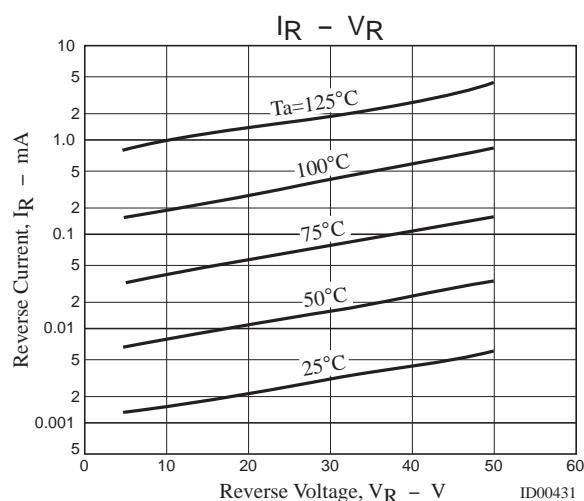
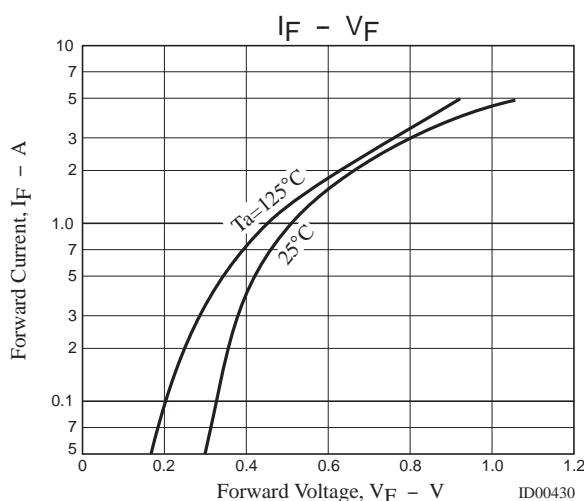
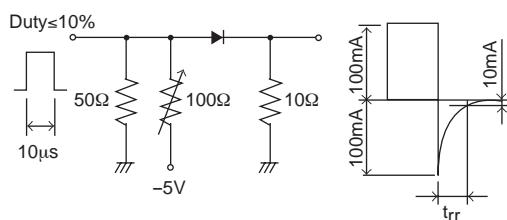
Package Dimensions

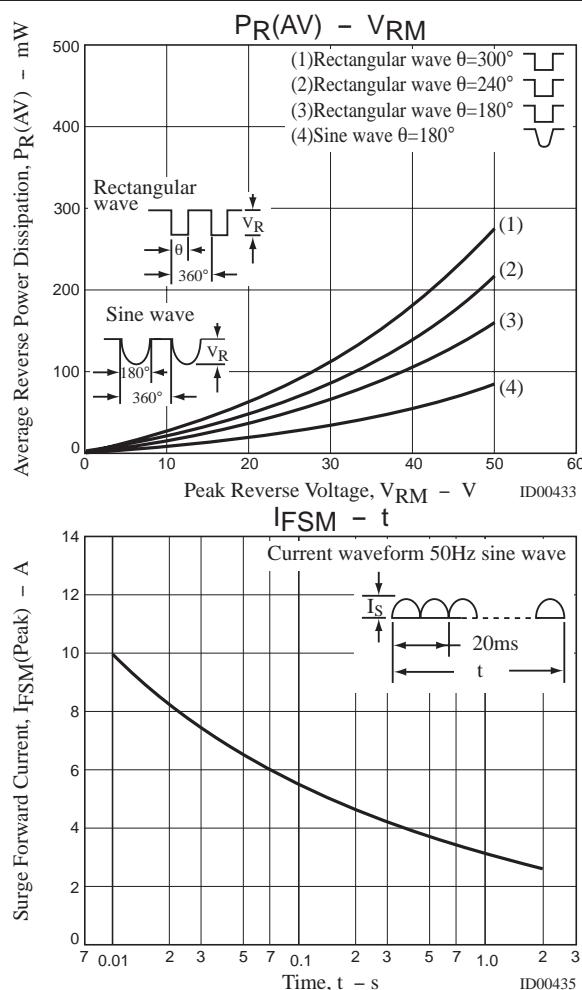
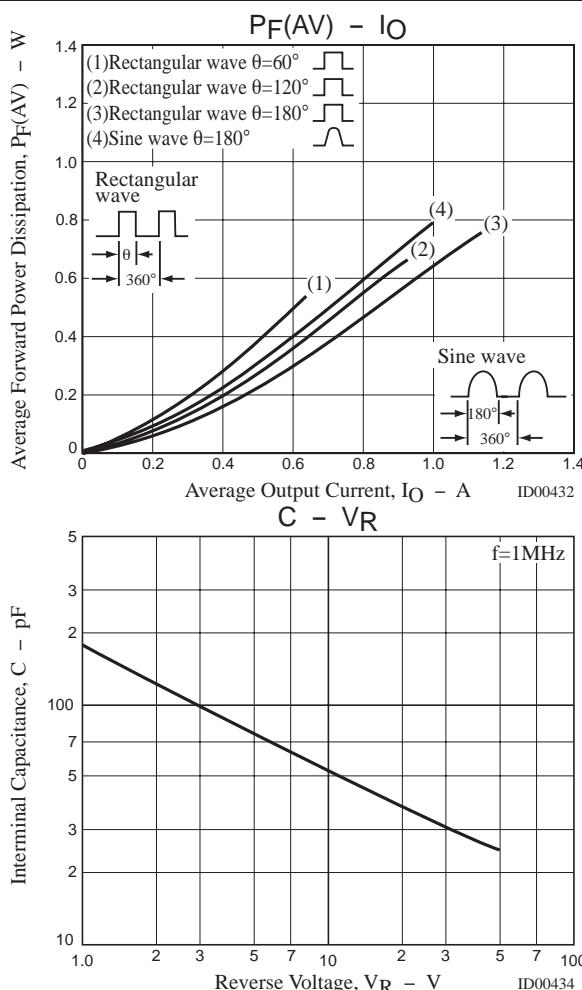
unit : mm (typ)

7007A-001



trr Test Circuit





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