



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SB07-03C — Schottky Barrier Diode 30V, 700mA Rectifier

Applications

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

Features

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

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		700	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=700\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			80	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		25		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit			10	ns

Marking : J

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SB07-03C

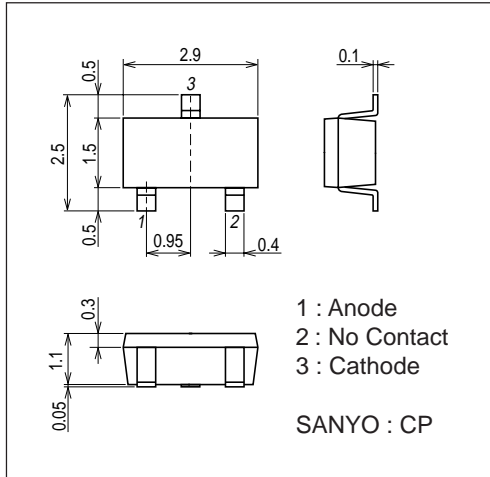
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Thermal Resistance	Rthj-a (1)	Mounted on Cu-foild area of 16mm ² X0.2mm on glass epoxy board		420		°C / W
	Rthj-a (2)			330		°C / W

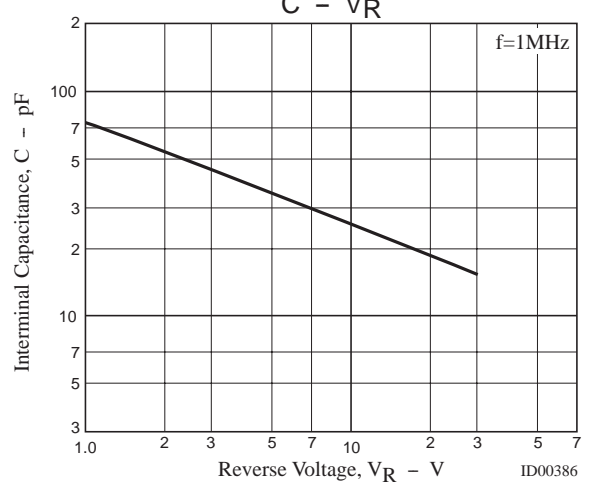
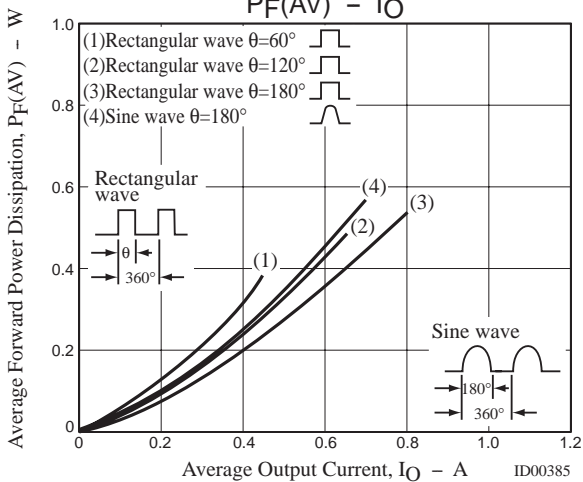
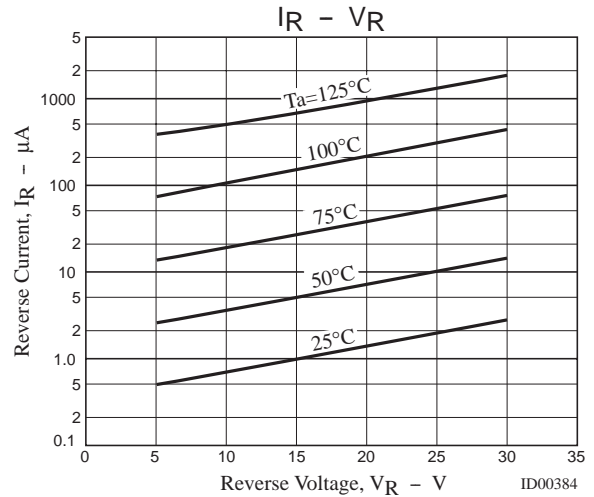
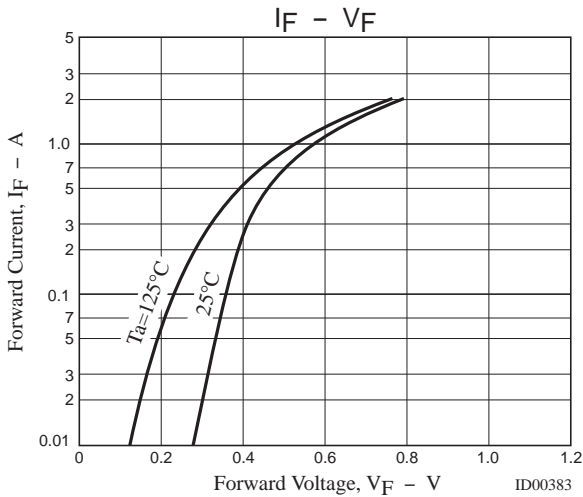
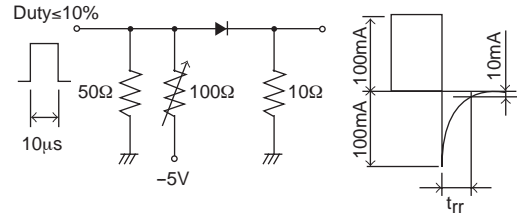
Package Dimensions

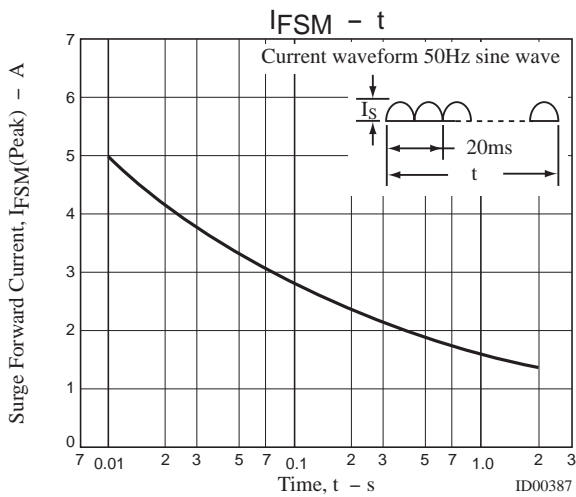
unit : mm (typ)

7013A-004



trr Test Circuit





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