


SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SB007-03C — Schottky Barrier Diode 30V, 70mA 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		70	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	2	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Marking : G

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SANYO Semiconductor Co., Ltd.

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

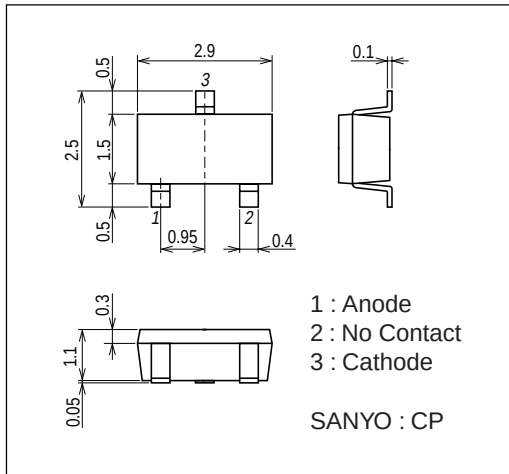
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=20\mu A$, $T_j=25^\circ C$	30			V
Forward Voltage	V_F	$I_F=70mA$, $T_j=25^\circ C$			0.55	V
Reverse Current	I_R	$V_R=15V$, $T_j=25^\circ C$			5	μA
Interterminal Capacitance	C	$V_R=10V$, $f=1MHz$		3.0		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$, $T_j=25^\circ C$, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			620		$^\circ C / W$
	Rthj-a(2)	Mounted in Cu-foiled area of 16mm ² ×0.2mm on glass epoxy board		430		$^\circ C / W$

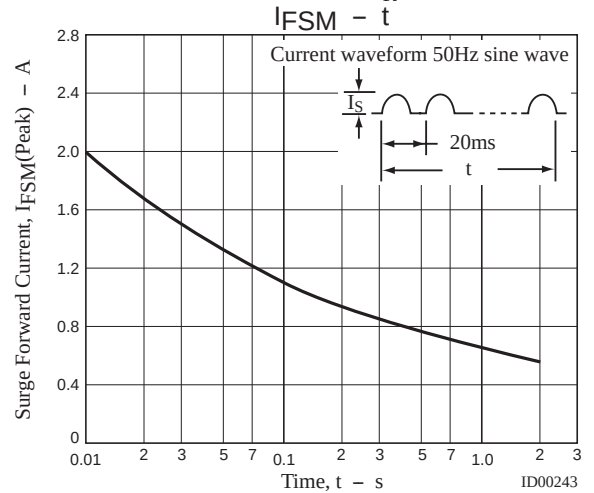
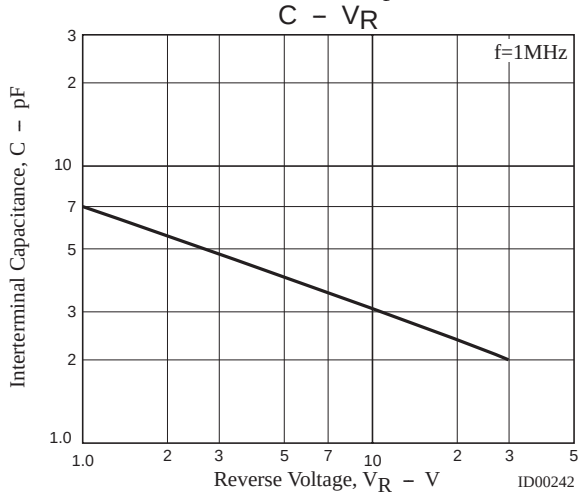
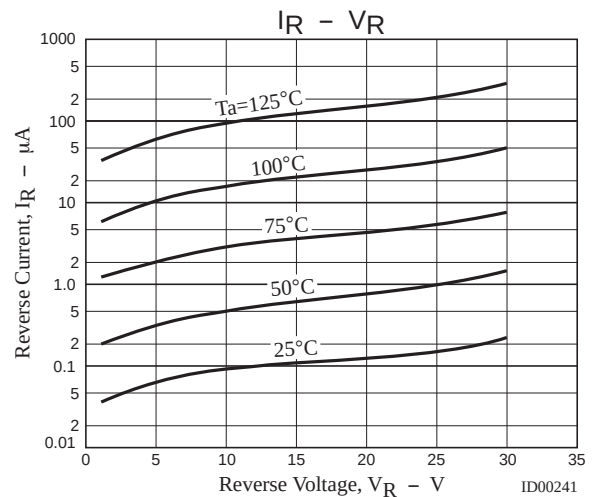
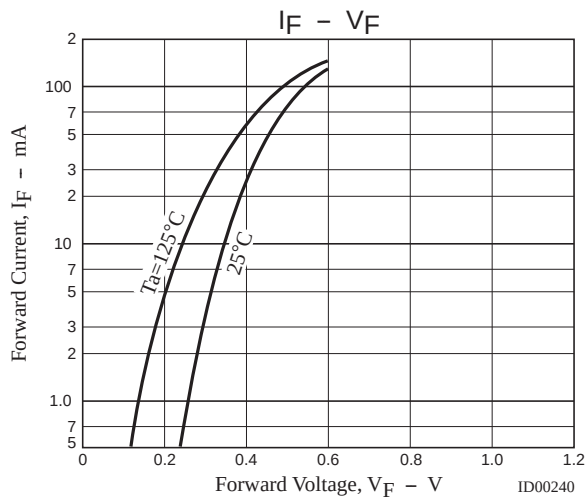
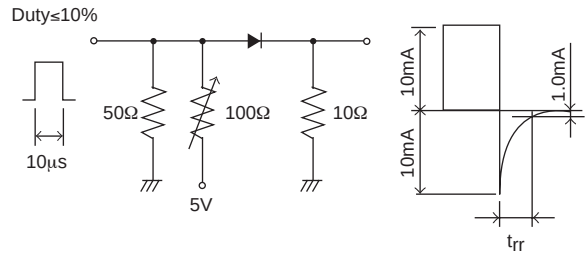
Package Dimensions

unit : mm (typ)

7013A-004



t_{rr} Test Circuit



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