



SANYO Semiconductors

DATA SHEET

SS0503SH

 — Schottky Barrier Diode
30V, 0.5A Rectifier

Applications

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

Features

- Low forward voltage ($I_F=0.3A$, $V_F \text{ max}=0.42V$) ($I_F=0.5A$, $V_F \text{ max}=0.47V$).
- Ultrasmall package permitting applied sets to be small and slim.

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}		30	V
Average Output Current	I_O		0.5	A
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	$I_R=0.5\text{mA}$	30			V
Forward Voltage	V_{F1}	$I_F=0.3A$		0.37	0.42	V
	V_{F2}	$I_F=0.5A$		0.42	0.47	V
Reverse Current	I_R	$V_R=15V$			120	μA
Interterminal Capacitance	C	$V_R=10V$, $f=1\text{MHz}$		13		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns

Marking : SB

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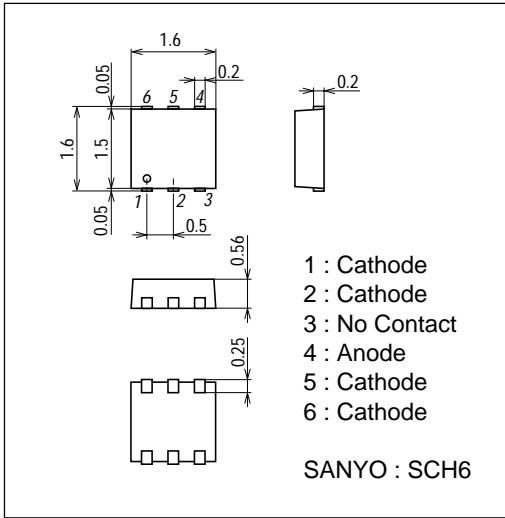
SANYO Electric Co., Ltd. Semiconductor Company

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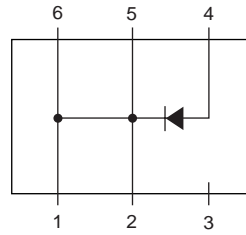
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Package Dimensions

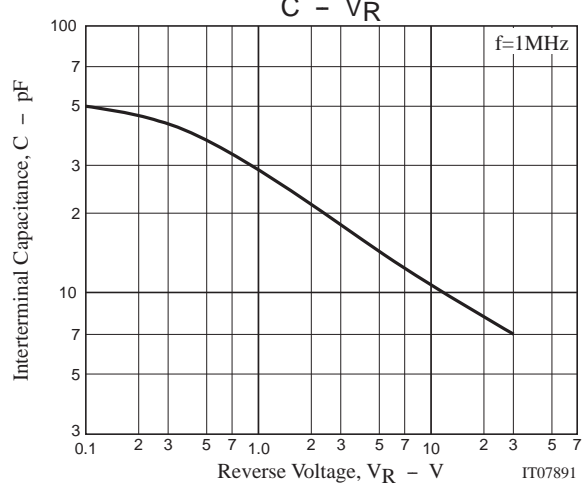
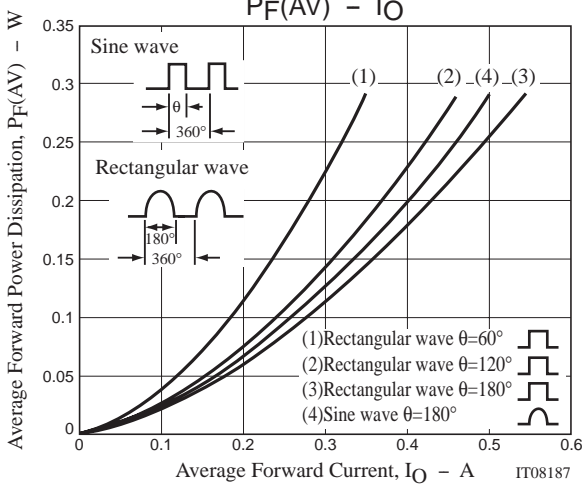
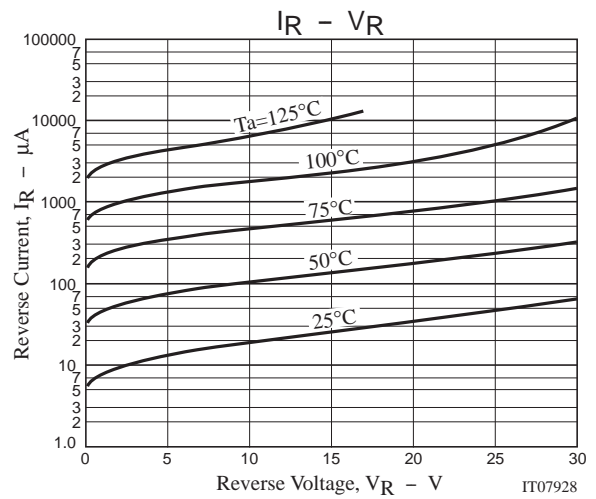
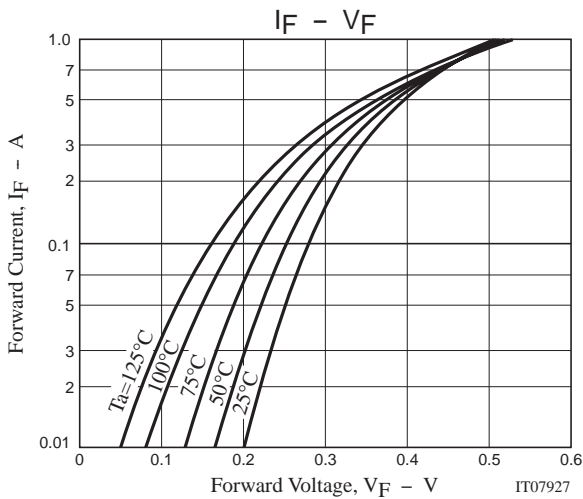
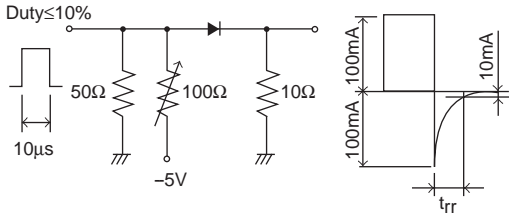
unit : mm
1329A



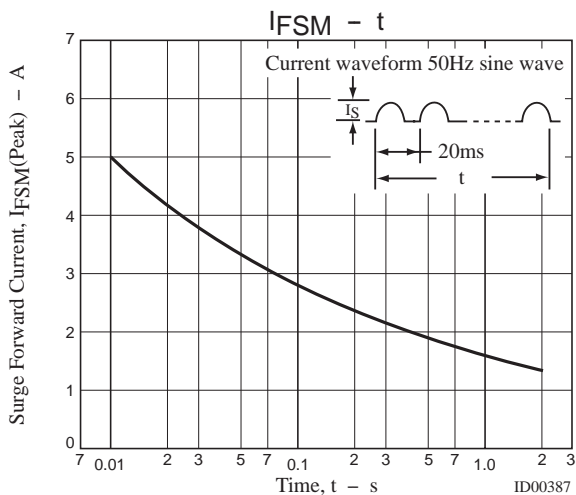
Electrical Connection(Top view)



t_{rr} Test Circuit



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