



SANYO Semiconductors

## DATA SHEET

# SS0310M

 Schottky Barrier Diode  

## 100V, 0.3A Rectifier

### Applications

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

### Features

- Low Switching noise.
- Low forward voltage ( $I_F=0.3A$ ,  $V_F \text{ max}=0.57V$ ).
- Ultrasmall package permitting SS0310M applied sets to be made small and slim.

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		100	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		100	V
Average Output Current	$I_O$		0.3	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	10	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	$V_R$	$I_R=0.5\text{mA}$	100			V
Forward Voltage	$V_F$	$I_F=0.3A$		0.52	0.57	V
Reverse Current	$I_R$	$V_R=50V$			600	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10V$ , $f=1\text{MHz}$		20		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)1}$	Mounted in Cu-foiled area of $0.72\text{mm}^2 \times 0.03\text{mm}$ on glass epoxy board		94.7		$^\circ\text{C} / \text{W}$
	$R_{th(j-a)2}$	Mounted on a ceramic board ( $1000\text{mm}^2 \times 0.8\text{mm}$ )		67.7		$^\circ\text{C} / \text{W}$

Marking : SH

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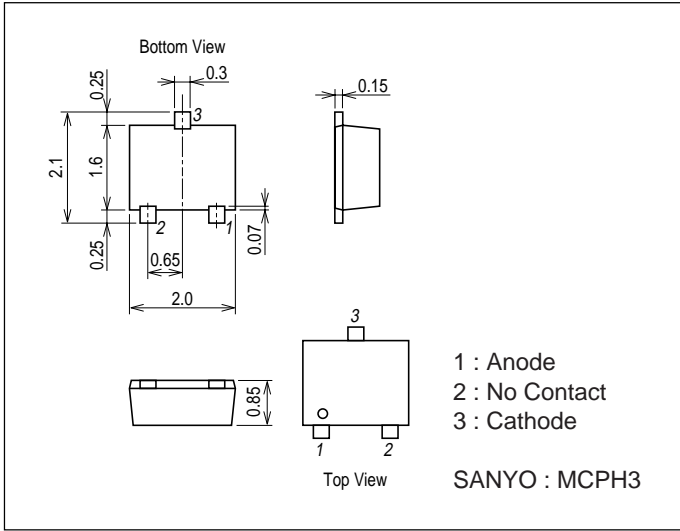
**SANYO Electric Co., Ltd. Semiconductor Company**

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

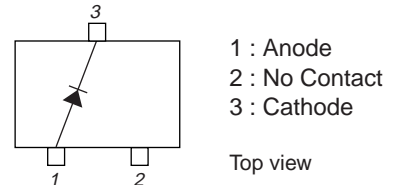
# SS0310M

## Package Dimensions

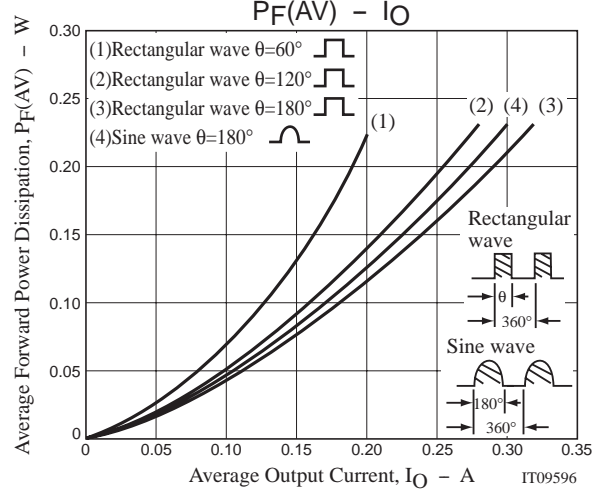
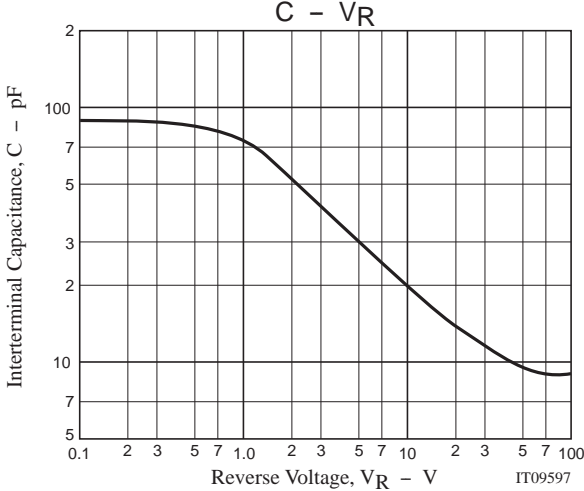
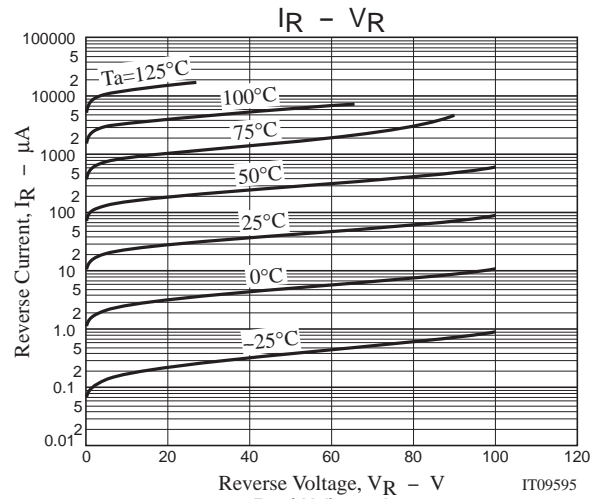
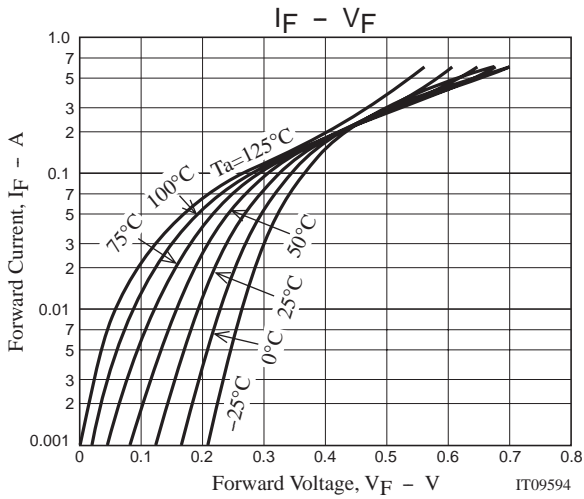
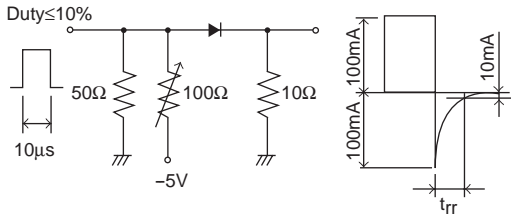
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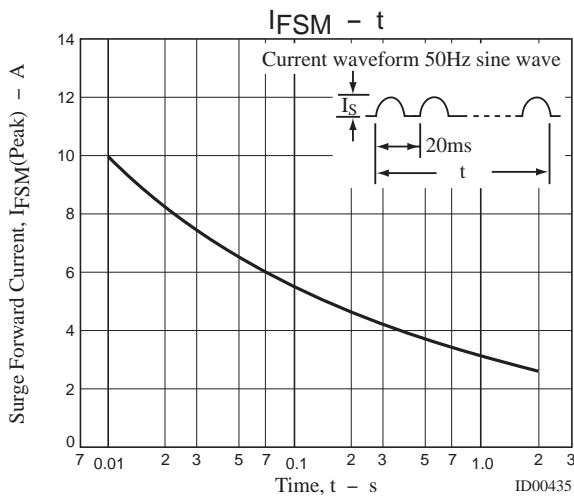


## Electrical Connection



## t<sub>rr</sub> Test Circuit





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