



SANYO Semiconductors

## DATA SHEET

# SS05015M

 — Schottky Barrier Diode  
**15V, 500mA Rectifier**

## Applications

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

## Features

- Low forward voltage ( $I_F=0.3A$ ,  $V_F \text{ max}=0.4V$ ) ( $I_F=0.5A$ ,  $V_F \text{ max}=0.45V$ ).
- Ultrasmall package permitting applied sets to be small and slim (mounting height 0.85mm).

## Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		15	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		15	V
Average Output Current	$I_O$		500	mA
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	$V_R$	$I_R=0.5\text{mA}$	15			V
Forward Voltage	$V_{F1}$	$I_F=0.3A$		0.35	0.4	V
	$V_{F2}$	$I_F=0.5A$		0.4	0.45	V
Reverse Current	$I_R$	$V_R=6V$			90	$\mu\text{A}$
Interterminal Capacitance	$C$	$V_R=10V$ , $f=1\text{MHz}$		15		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm <sup>2</sup> X0.8mm)		138		$^\circ\text{C} / \text{W}$

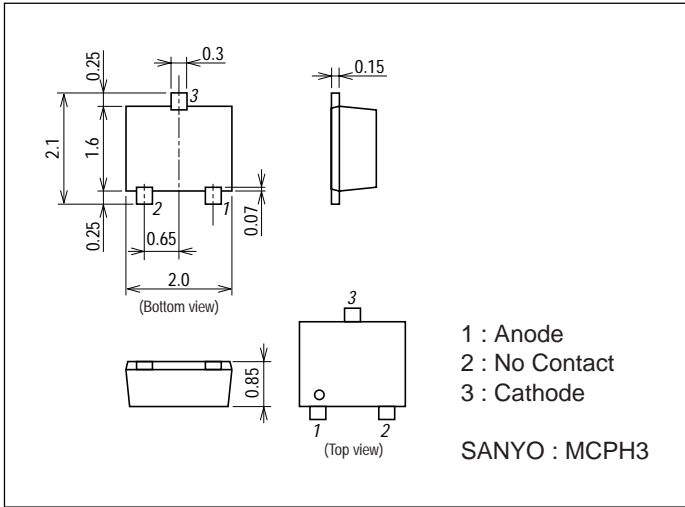
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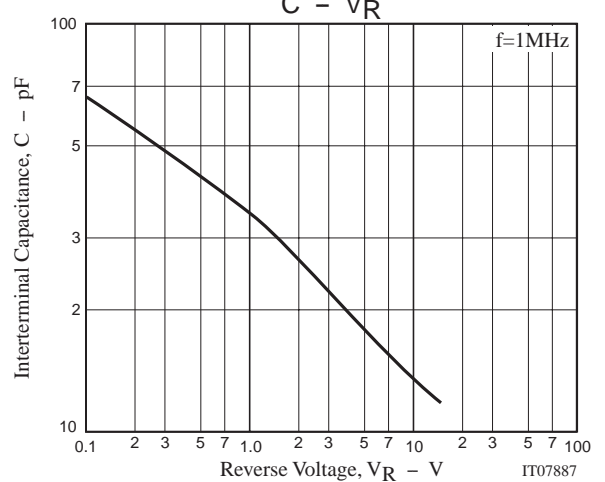
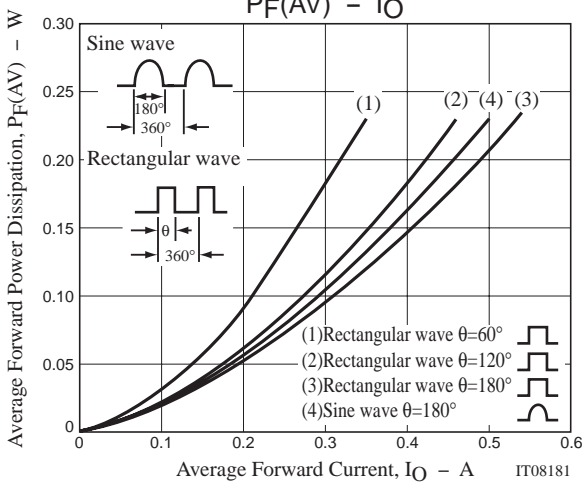
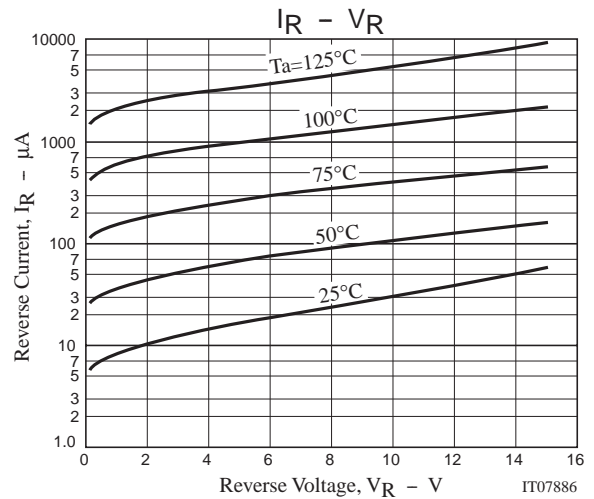
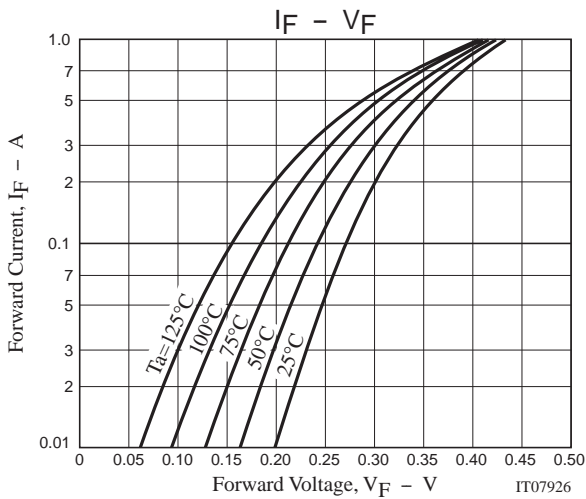
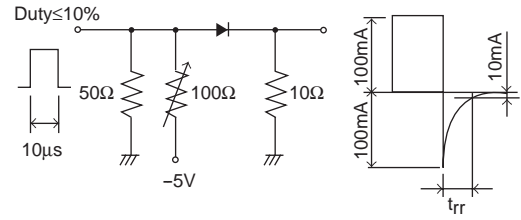
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## Package Dimensions

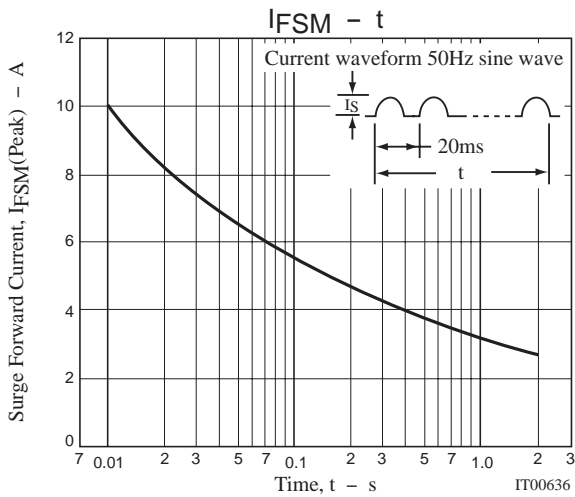
unit : mm  
1305A



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



## SS05015M



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