



SANYO Semiconductors

DATA SHEET

SBS010M — Schottky Barrier Diode

15V, 2A Rectifier

Applications

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

Features

- Low forward voltage ($I_F=0.5A$, $V_F \text{ max}=0.32V$) ($I_F=1.0A$, $V_F \text{ max}=0.35V$).
- Ultrasmall-sized package permitting applied sets to be made 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		2	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	$I_R=1.5mA$	15			V
Forward Voltage	V_{F1}	$I_F=0.5A$		0.27	0.32	V
	V_{F2}	$I_F=1A$		0.3	0.35	V
Reverse Current	I_R	$V_R=6V$			600	μA
Interterminal Capacitance	C	$V_R=10V$, $f=1MHz$		65		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			15	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm ² X0.8mm)		105		$^\circ\text{C} / W$

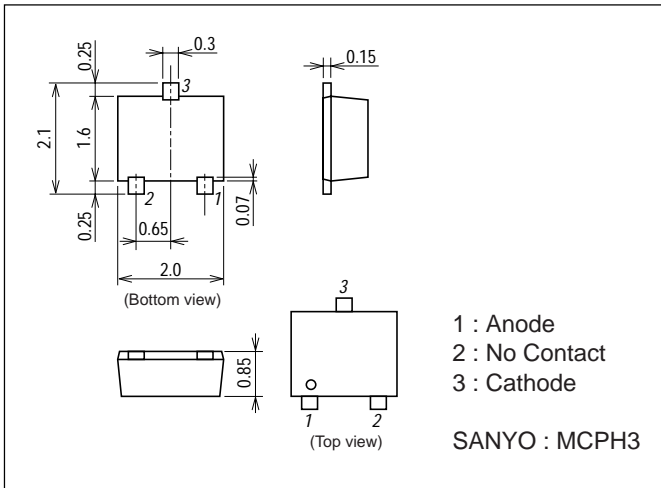
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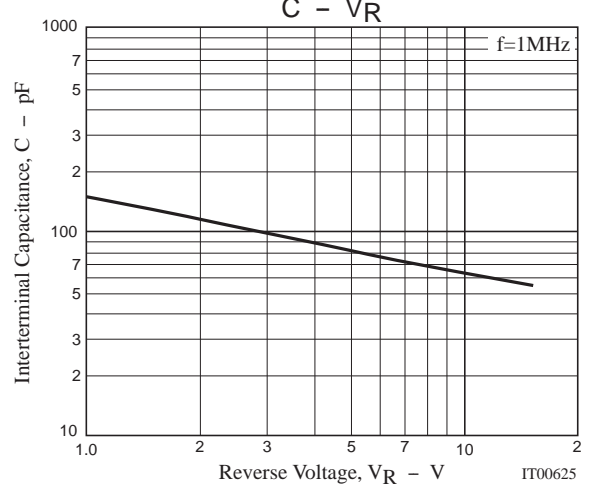
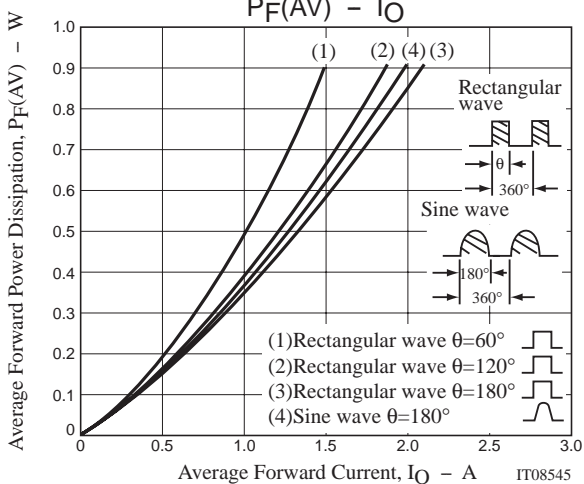
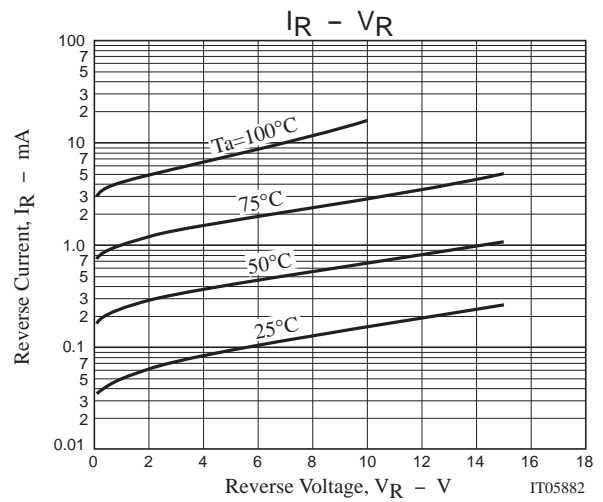
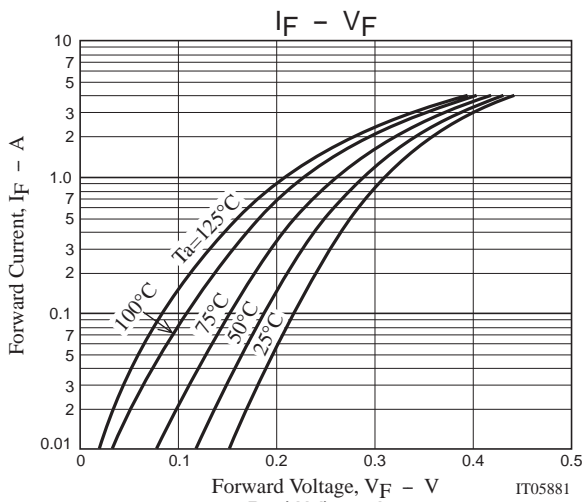
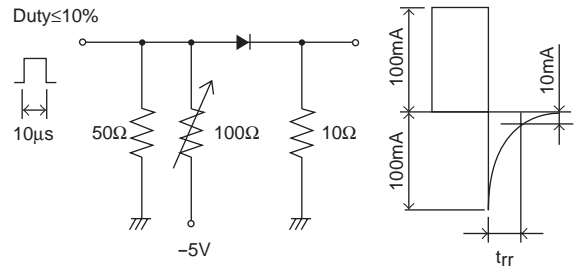
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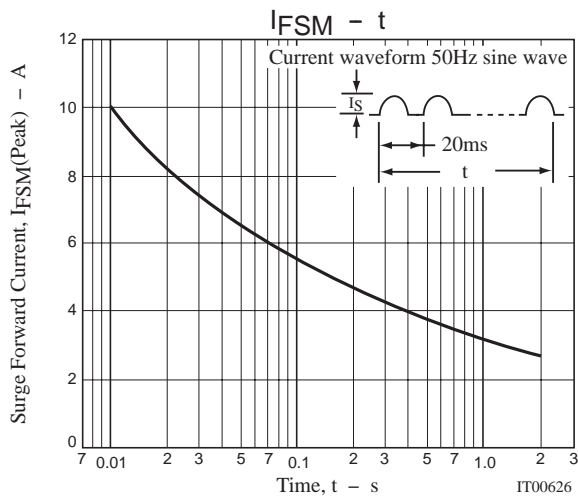
Package Dimensions

unit : mm
1305A



t_{rr} Test Circuit





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