



SANYO Semiconductors

DATA SHEET

SB1003M3

 — Schottky Barrier Diode
30V, 1.0A Rectifier

Applications

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

Features

- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultrasmall package permitting applied sets to be small and slim (Mounting height 0.85mm).

Specifications

Absolute Maximum Ratings at Ta=25°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		1.0	A
Surge Forward Current	I _{FSM}	50Hz sine wave, 1 cycle	10	A
Junction Temperature	T _J		-55 to +125	°C
Storage Temperature	T _{stg}		-55 to +125	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =0.5mA	30			V
Forward Voltage	V _{F1}	I _F =0.7A		0.45	0.50	V
	V _{F2}	I _F =1.0A		0.48	0.53	V
Reverse Current	I _R	V _R =16V			15	μA
Interterminal Capacitance	C	V _R =10V, f=1MHz		27		pF
Reverse Recovery Time	t _{rr}	I _F =I _R =100mA, See specified Test Circuit.			10	ns
Thermal Resistance	R _{th(j-a)1}	Mounted in Cu-foiled area of 0.72mm ² X0.03mm on glass epoxy board		94.7		°C / W
	R _{th(j-a)2}	Mounted on a ceramic board (500mm ² X0.8mm)		67.7		°C / W

Marking : SK

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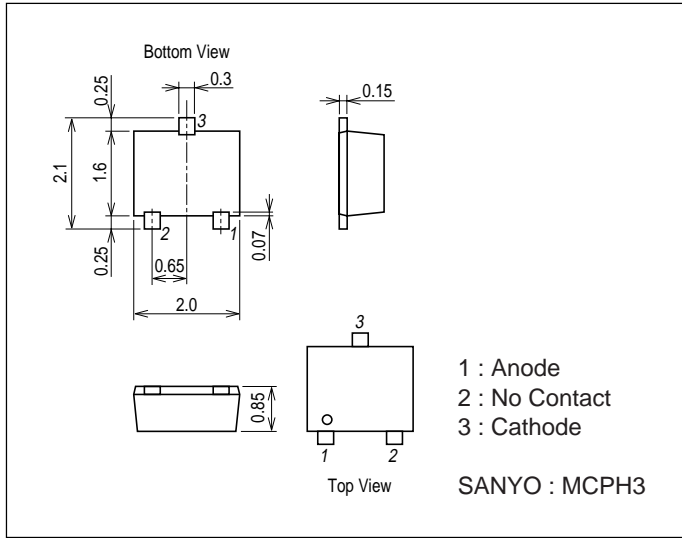
SANYO Electric Co.,Ltd. Semiconductor Company

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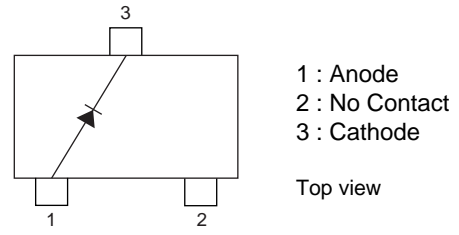
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Package Dimensions

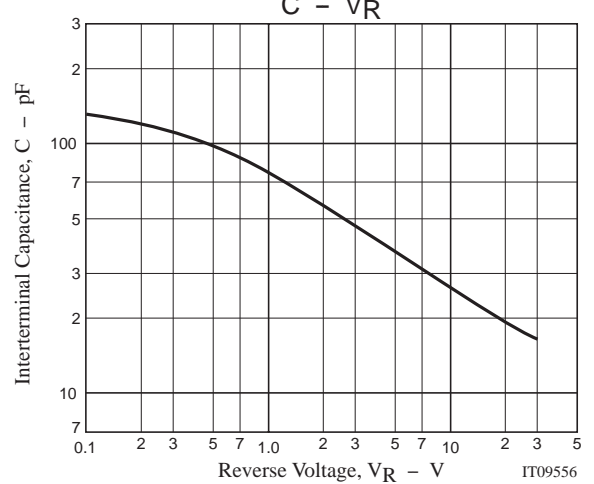
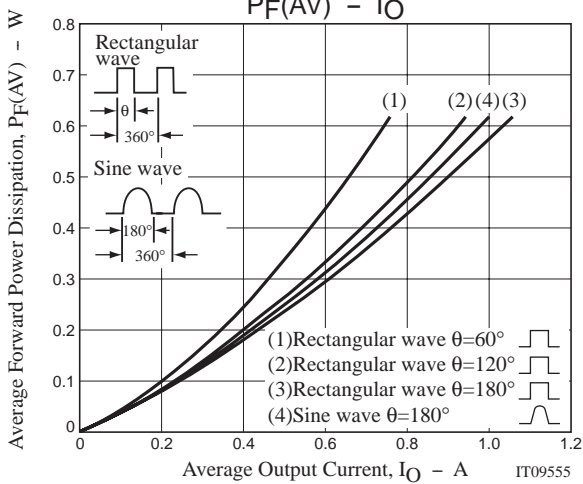
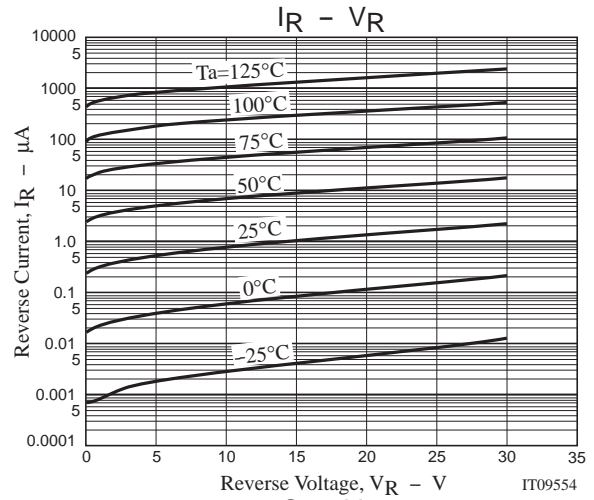
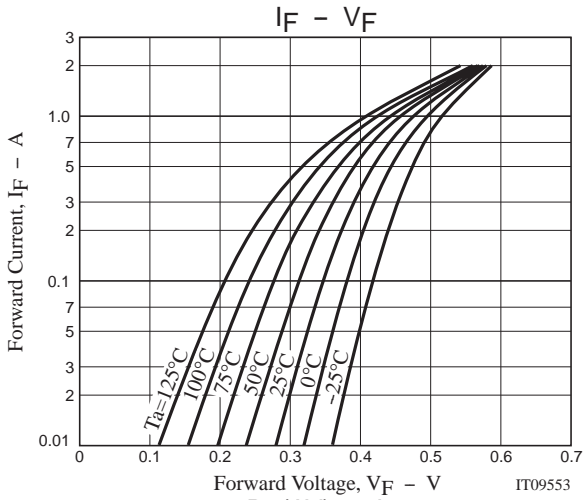
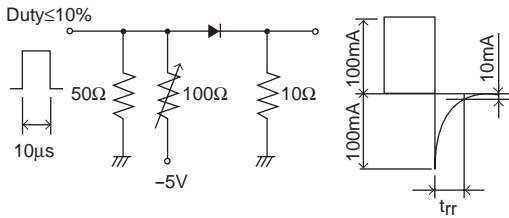
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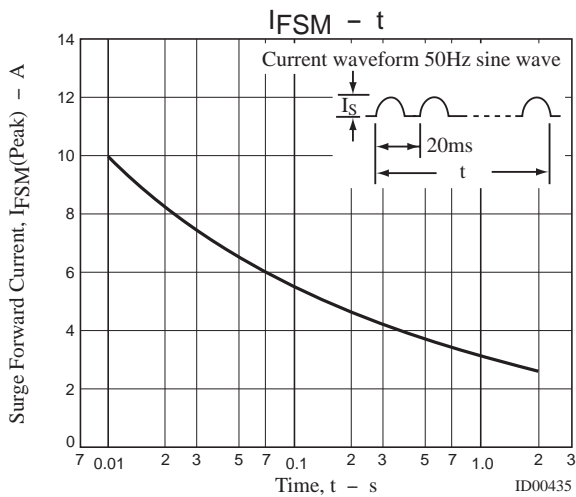
Electrical Connection



t_{rr} Test Circuit



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