Ordering number : ENN8371

SANYO Semiconductors
DATA SHEET

SB2003M — Schottky Barrier Diode
30V, 2.0A 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		2.0	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	10	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=0.2mA	30			V
Forward Voltage	V_F	I_F=1.0A		0.40	0.45	V
		I_F=2.0A		0.45	0.50	V
Reverse Current	I_R	V_R=15V			30	µA
Interterminal Capacitance	C	V_R=10V, f=1MHz		75		pF
Reverse Recovery Time	t_{rr}	I_F=I_R=100mA, See specified Test Circuit.			20	ns
Therrmal Resistance	Rth(j-a)1	Mounted in Cu-foiled area of 1.44mm²X0.03mm on glass epoxy board		93.4		°C / W
	Rth(j-a)2	Mounted on a ceramic board (500mm²X0.8mm)		71.4		°C / W

Marking : SE

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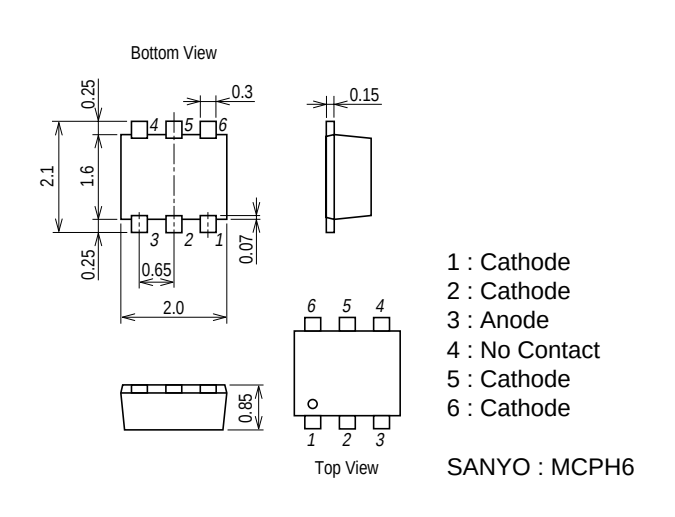
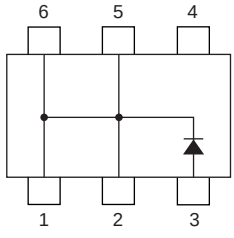
SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Package Dimensions

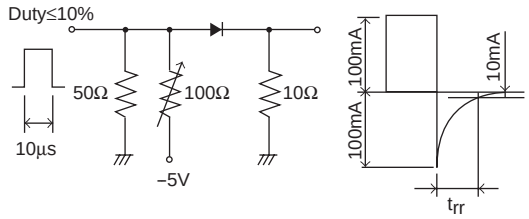
unit : mm
7022-014

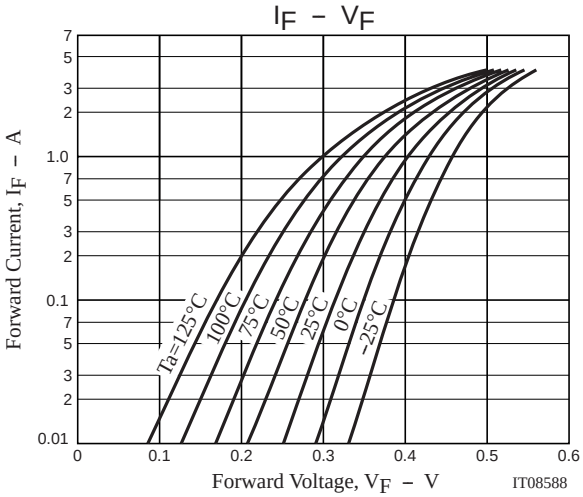


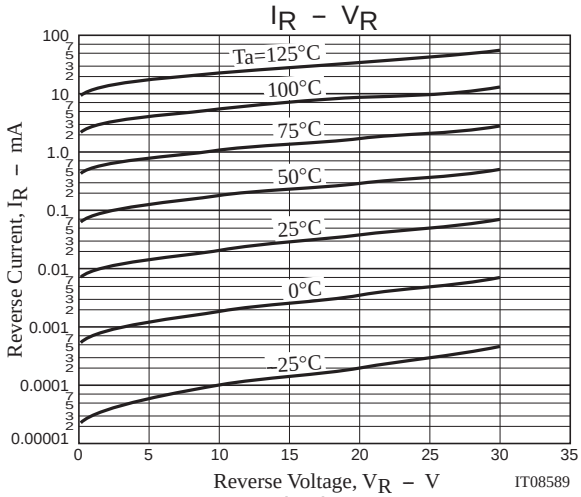
Electrical Connection

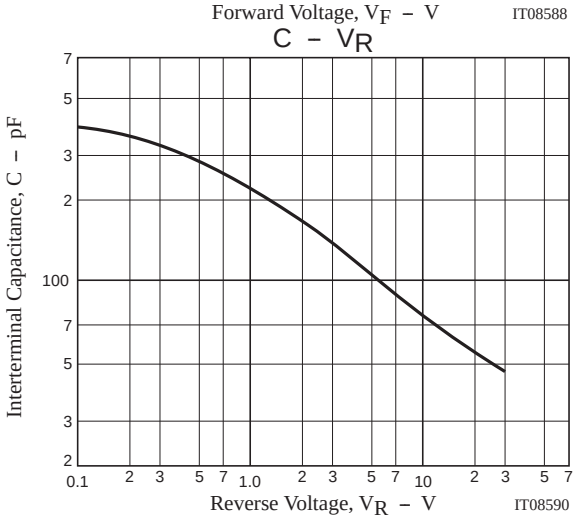


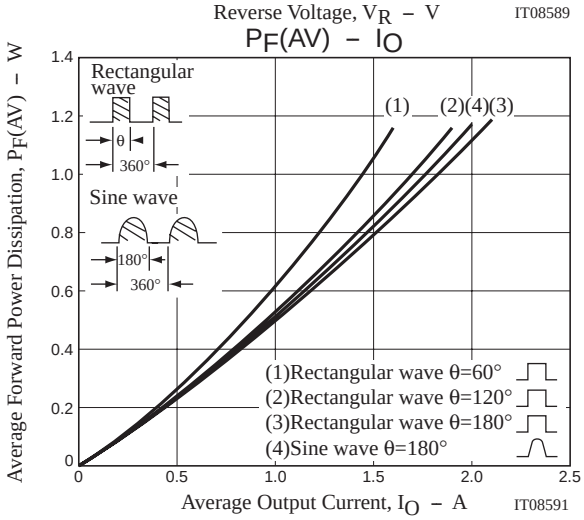
t_{rr} Test Circuit

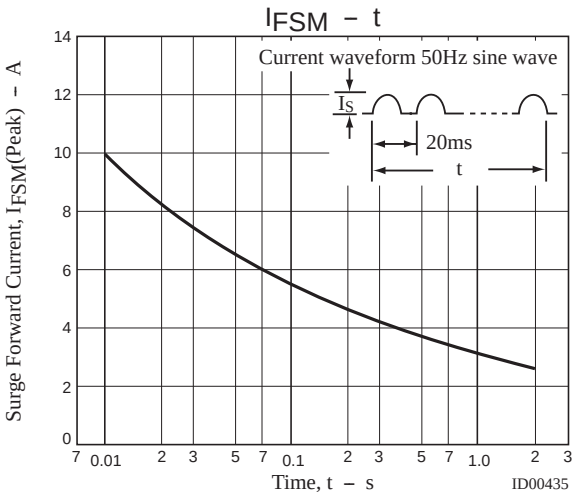












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