

# SANYO Semiconductors DATA SHEET

## SB0503EC — Low IR Schottky Barrier Diode 30V, 0.5A Rectifier

## **Applications**

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

#### **Features**

- · Low switching noise.
- · Low leakage current and high reliability due to planar structure.
- Ultraminiature (1008 size) and thin (0.6mm) leadless package.

## **Specifications**

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	lΟ		0.5	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	Α
Junction Temperature	Tj		-55 to +150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta=25°C

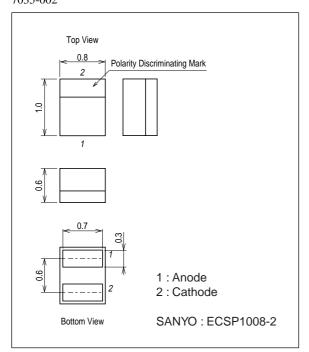
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧R	I <sub>R</sub> =0.2mA	30			V
Forward Voltage	VF	IF=0.5A			0.65	V
Reverse Current	IR	V <sub>R</sub> =15V			1.5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		6		pF
Reverse Recovery Time	trr	IF=IR=100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)	Mounted in Cu-foiled area of 0.72mm <sup>2</sup> X0.03mm		200		°C/W
		on glass epoxy board				

Marking : DA

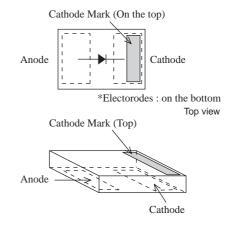
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## **Package Dimensions**

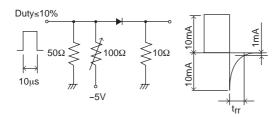
unit : mm (typ) 7035-002

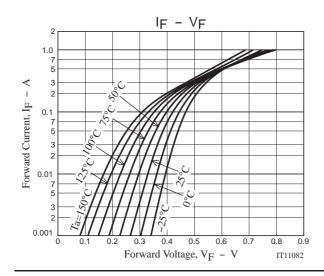


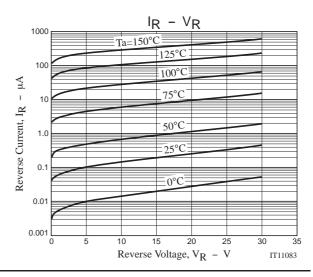
## **Electrical Connection**



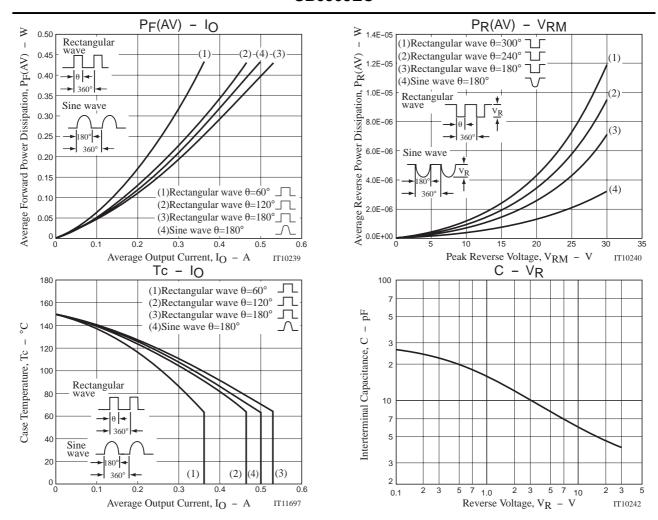
## trr Test Circuit







## **SB0503EC**



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