

# 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	lo		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	٧F	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	t <sub>rr</sub>	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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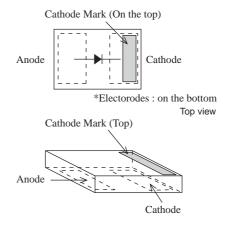
### **Package Dimensions**

unit : mm (typ) 7035-002

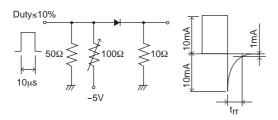
# Top View O.8 2 Polarity Discriminating Mark 1 1 1 Anode 2: Cathode Bottom View SANYO: ECSP1008-2

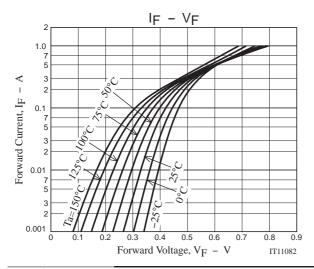
### **Electrical Connection**

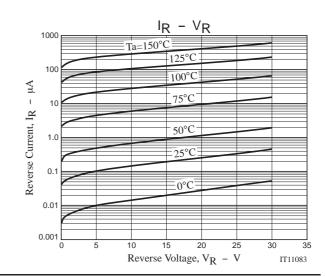
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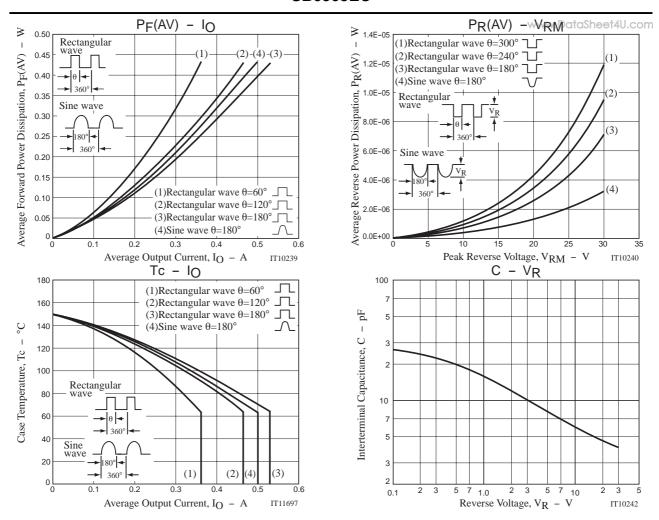
### trr Test Circuit







### **SB0503EC**



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PS No. A0414-3/3