

# SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

# SB01-15C — Schottky Barrier Diode 150V, 100mA Rectifier

## **Applications**

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

#### **Features**

- Low forward voltage ( $V_F$  max=0.75V).
- Fast reverse recorvery time (t<sub>rr</sub> max=10ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

## **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		150	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		155	V
Average Output Current	lo		100	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

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

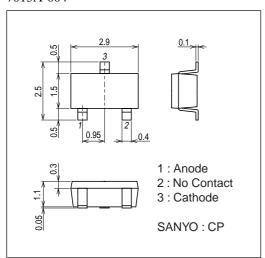
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧R	I <sub>R</sub> =200μA	150			V
Forward Voltage	٧F	IF=100mA			0.75	V
Reverse Current	IR	V <sub>R</sub> =75V			50	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		7		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			420		°C/W
	Rthj-a(2)	Mounted in Cu-foiled area of 16mm <sup>2</sup> X0.2mm		330		°C/W
		on glass epoxy board				

Marking: F

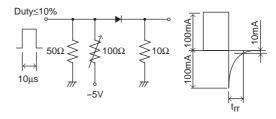
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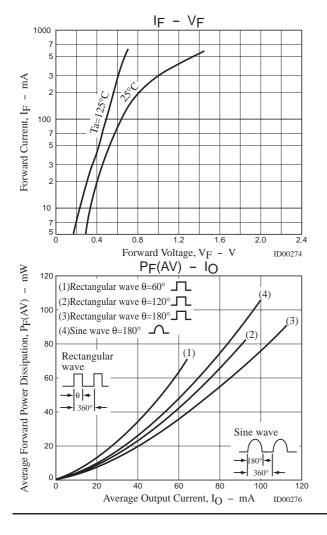
#### **Package Dimensions**

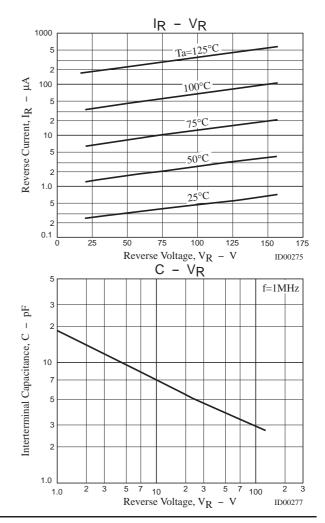
unit : mm 7013A-004

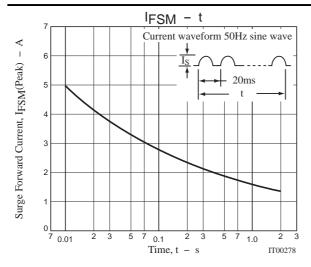


#### trr Test Circuit









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