

# SANYO Semiconductors DATA SHEET

An ON Semiconductor Company



Schottky Barrier Diode **30V, 70mA Rectifier** 

## Applications

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

## Features

- + Low forward voltage (V<sub>F</sub> max=0.55V).
- 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		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO		70	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	2	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Marking : G

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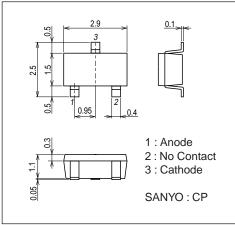
### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Reverse Voltage	VR	I <sub>R</sub> =20μA, Tj=25°C	30			V
Forward Voltage	VF	IF=70mA, Tj=25°C			0.55	V
Reverse Current	IR	V <sub>R</sub> =15V, Tj=25°C			5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		3.0		pF
Reverse Recovery Time	t <sub>rr</sub>	IF=IR=10mA, Tj=25°C, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			620		°C/W
	Rthj-a(2)	Mounted in Cu-foiled area of 16mm <sup>2</sup> ×0.2mm		430		°C / W
		on glass epoxy board				

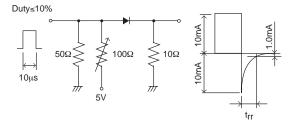
#### Package Dimensions

unit : mm (typ)

7013A-004



## trr Test Circuit



IR - VR

50°C

25°C

15

20

Is ŧ

0.1 2 3 Time, t – s

3

57 1.0

25

Current waveform 50Hz sine wave

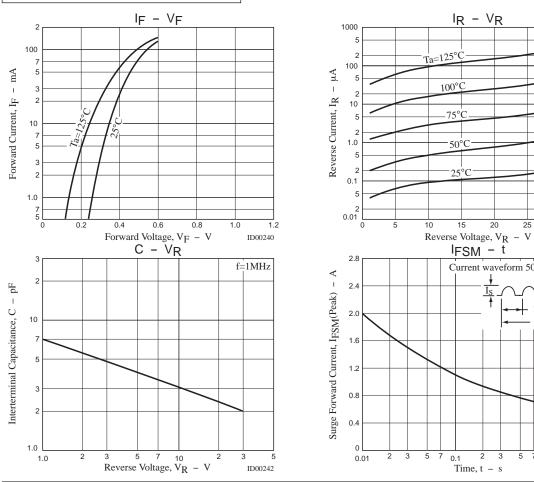
20ms

t

30

35

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2 3

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