Ordering number : ENA0406

SANYO Semiconductors
DATA SHEET

An ON Semiconductor Company

SB01-05C — Schottky Barrier Diode 50V, 100mA Rectifier

Applications

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

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recorvery time (t_{rr} 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	V_{RRM}		50	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		55	V
Average Output Current	I_O		100	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	2	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta=25°C

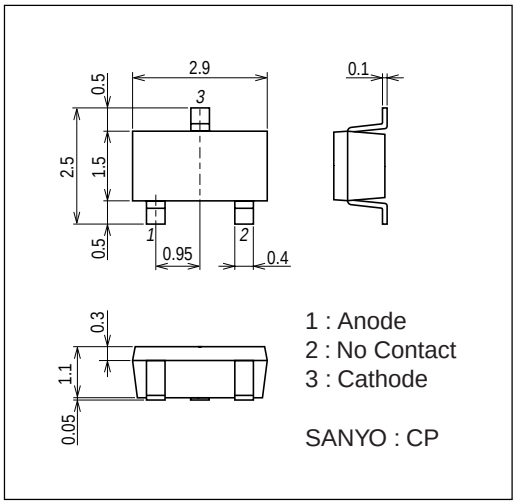
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=50μA, Tj=25°C	50			V
Forward Voltage	V_F	I_F=100mA, Tj=25°C			0.55	V
Reverse Current	I_R	V_R=25V, Tj=25°C			15	μA
Interterminal Capacitance	C	V_R=10V, f=1MHz		4.4		pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA, Tj=25°C, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			560		°C / W
	Rthj-a(2)	Mounted in Cu-foiled area of 16mm²×0.2mm on glass epoxy board		410		°C / W

Marking : A

Package Dimensions

unit : mm

7013A-004



t_{rr} Test Circuit