Ordering number : ENN7291

Silicon Schottky Barrier Diode

SBE805

30V, 500mA Rectifier

An ON Semiconductor Company

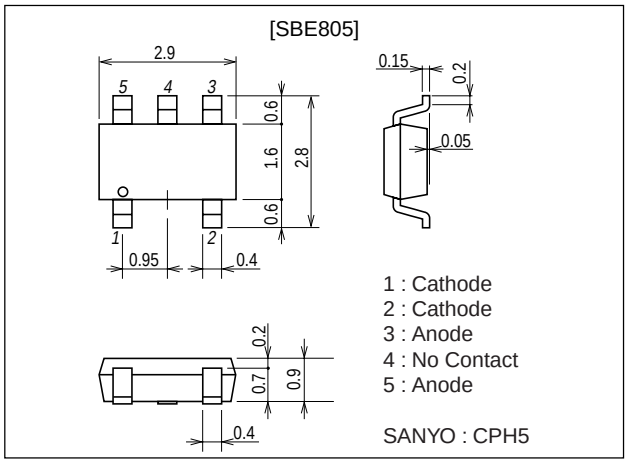
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=10ns).
- Composite type with 2 diodes contained in the CPH package currently in use, improving the mounting efficiency greatly.
- The chips incorporated are both equivalent to the SB05-03C.

Package Dimensions

unit : mm

1294



Specifications

Absolute Maximum Ratings at Ta=25°C (Value per element)

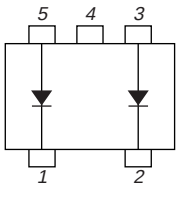
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Non-repetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		500	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	Tj		−55 to +125	°C
Storage Temperature	Tstg		−55 to +125	°C

Electrical Characteristics at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=150μA	30			V
Forward Voltage	V_F	I_F=500mA			0.55	V
Reverse Current	I_R	V_R=15V			30	μA
Interterminal Capacitance	C	V_R=10V, f=1MHz		16		pF
Reverse Recovery Time	t_{rr}	I_F=I_R=100mA, see specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)			300		°C / W

Marking : SE

Electrical Connection



1 : Cathode
2 : Cathode
3 : Anode
4 : No Contact
5 : Anode

(Top view)

t_{rr} Test Circuit