

# **SB007T03Q**

**Schottky Barrier Diode (Series Connection)** 

# 30V, 70mA Rectifier

## **Applications**

- · Universal-use rectifiers.
- · High frequency rectification (switching regulators, converters, choppers).

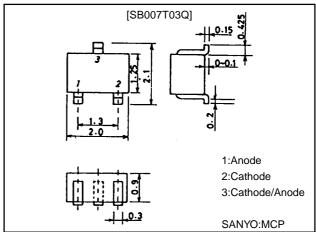
#### **Features**

- · Low forward voltage ( $V_F$  max=0.55V).
- · Fast reverse recovery time ( $t_{rr}$  max=10ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.
- Series connection of 2 elements in an ultrasmallsized package facilitates high-density mounting and permits SB007T03Q-applied equipment to be made smaller.

## **Package Dimensions**

unit:mm

1246A



## **Specifications**

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

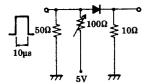
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Non-repetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		35	V
Average Output Current	lo		70	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	2	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

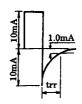
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	٧ <sub>R</sub>	I <sub>R</sub> =20μA	30			V
Forward Voltage	٧ <sub>F</sub>	I <sub>F</sub> =70mA			0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =15V			5	μA
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		3.0		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, See specified Test Circuit			10	ns
Thermal Resistance	R <sub>th(j-a)</sub>			650		°C/W

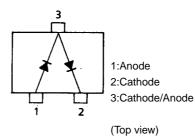
Marking: N

## t<sub>rr</sub> Test Circuit Duty≤ 10%

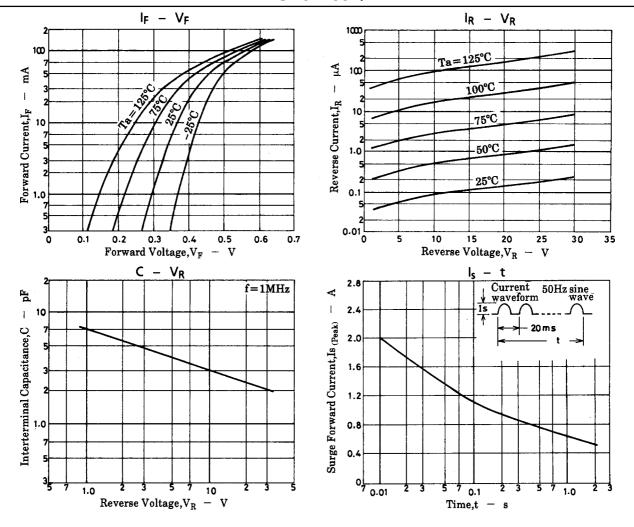




#### **Electrical Connection**



### **SB07T03Q**



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