

## **SB007W03Q**

Schottky Barrier Diode (Twin Type - Cathode Common)

# 30V, 70mA Rectifier

# **Applications**

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

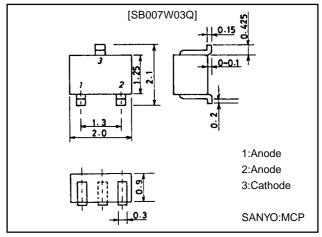
### **Features**

- · Low forward voltage (V<sub>F</sub> 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.
- · Ultrasmall-sized package permitting SB007W03Q-applied sets to be made small and slim.

## **Package Dimensions**

unit:mm

1198A



## **Specifications**

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

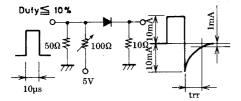
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		30	V
Non-repetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		35	V
Average Output Current	lo		70	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	2	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature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

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

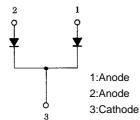
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	٧R	I <sub>R</sub> =20μA	30			V
Forward Voltage	٧F	I <sub>F</sub> =70mA			0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =15V			5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		3.0		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, See specified Test Circuit			10	ns

Marking: K

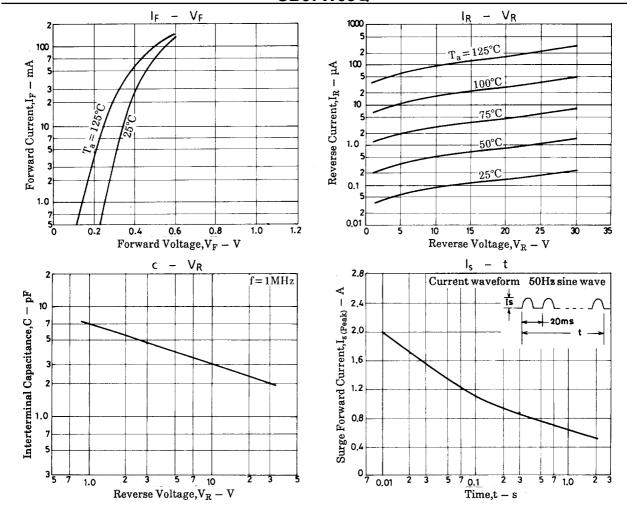
#### t<sub>rr</sub> Test Circuit



#### **Electrical Connection**



## **SB07W03Q**



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
  - ② Not impose any responsibilty for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of June, 1998. Specifications and information herein are subject to change without notice.