



SANYO Semiconductors

DATA SHEET

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 ultrasmall-sized package facilitates high-density mounting and permits SB007T03Q-applied equipment to be made smaller.

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		70	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	2	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=20\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=70\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			5	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		3.0		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm ² X0.8mm)		650		$^\circ\text{C} / \text{W}$

Marking : N

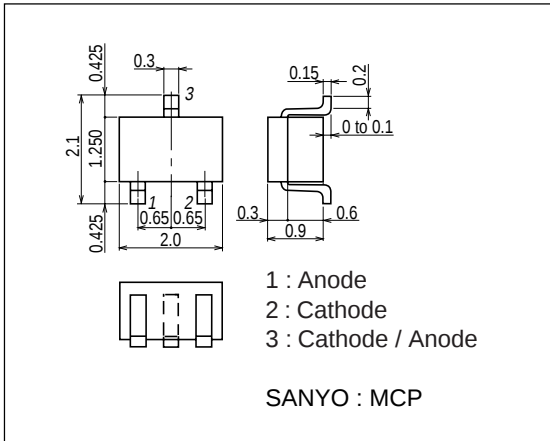
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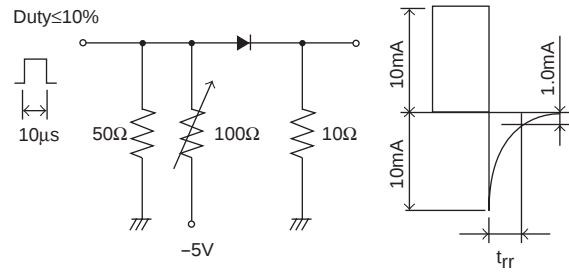
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Package Dimensions

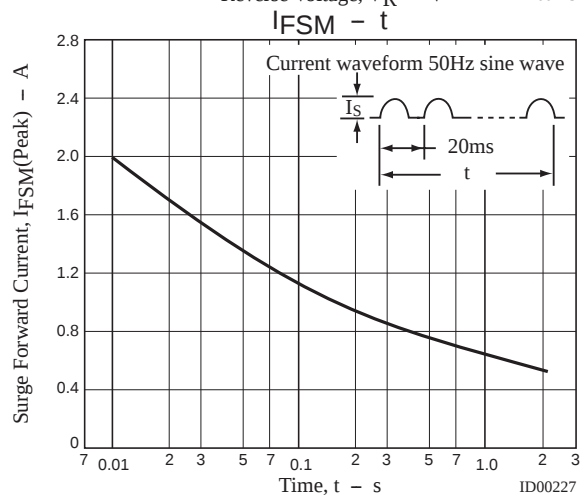
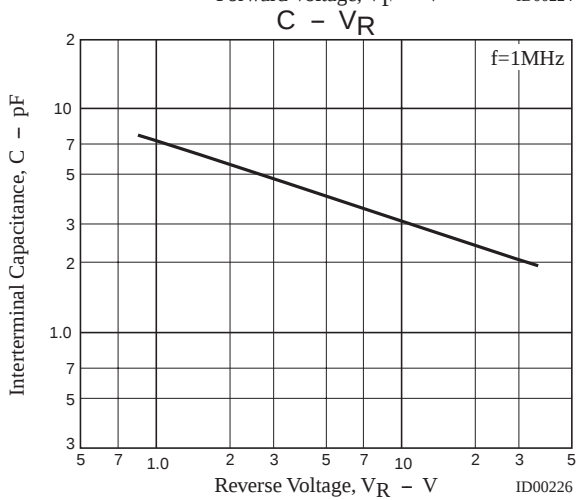
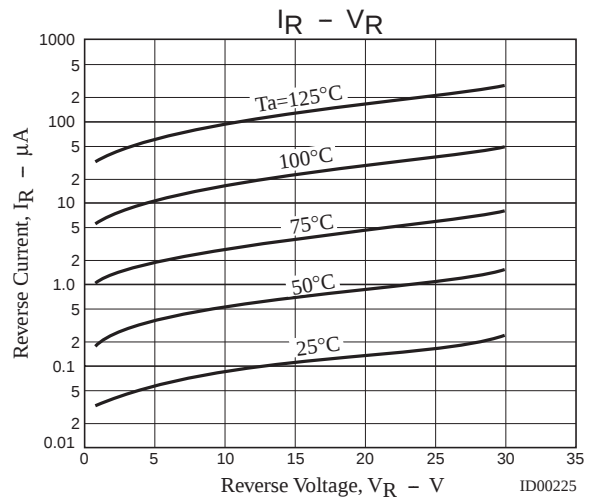
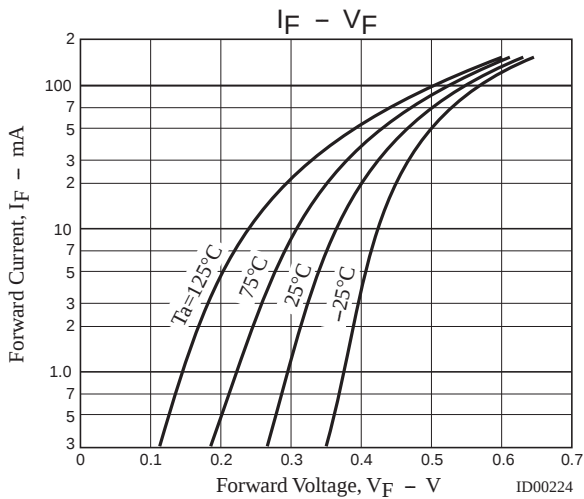
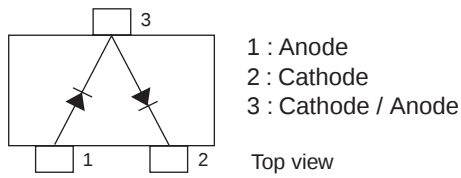
unit : mm
1246A



t_{rr} Test Circuit



Electrical Connection



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