



SB007-03CP

Shottky Barrier Diode

30V, 70mA Rectifier

Applications

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

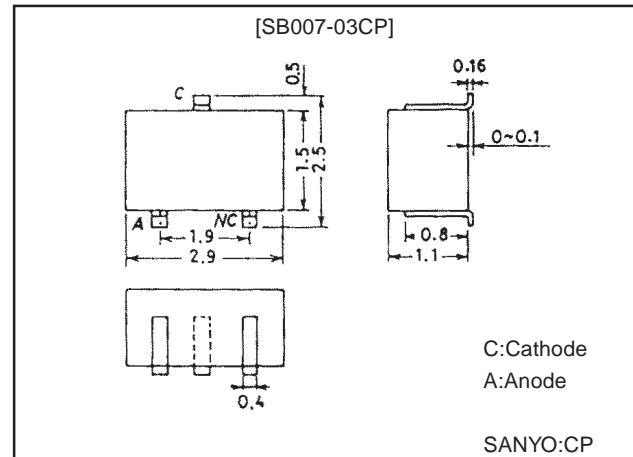
Features

- 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.

Package Dimensions

unit:mm

1148



Specifications

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

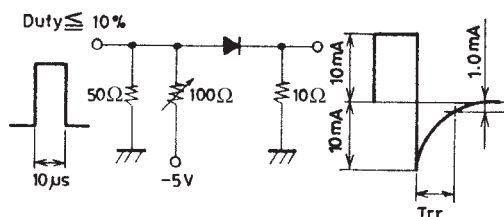
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		-30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		-35	V
Average Output Current	I_O		70	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1cycle	2	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	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	Rthj-a(1)			620		$^\circ\text{C/W}$
	Rthj-a(2)	Mounted on Cu-foiled area of $16\text{mm}^2 \times 0.2\text{mm}$ on glass epoxy board		430		$^\circ\text{C/W}$

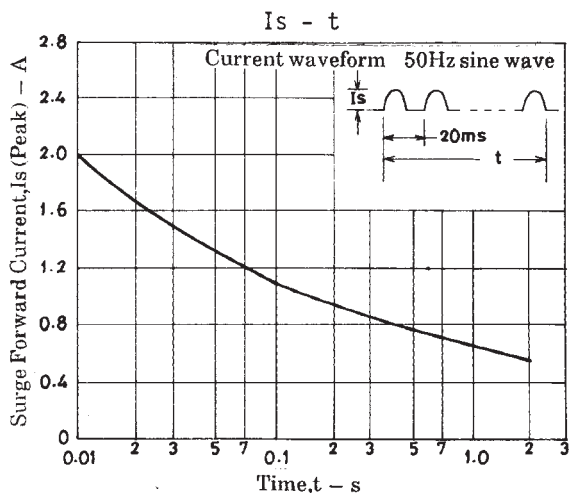
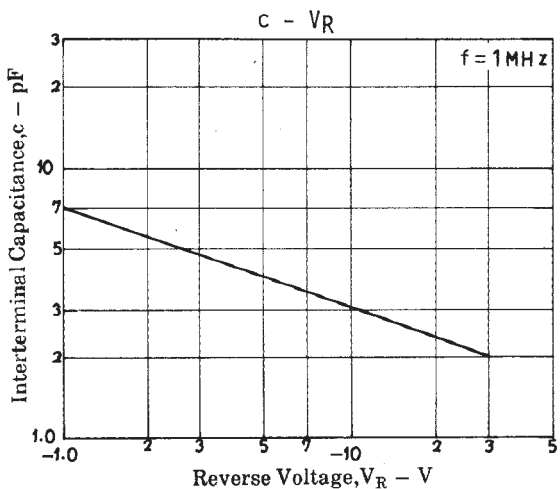
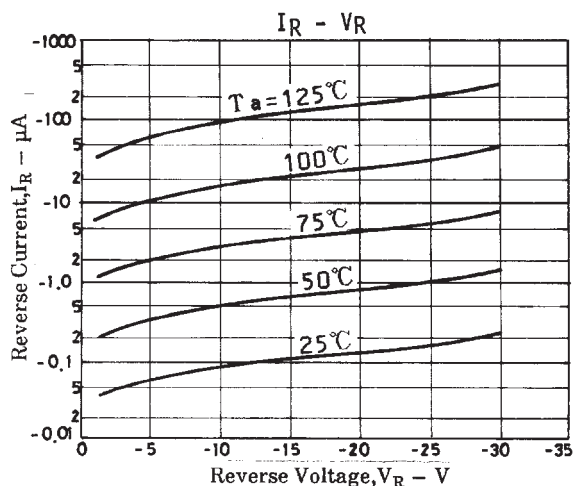
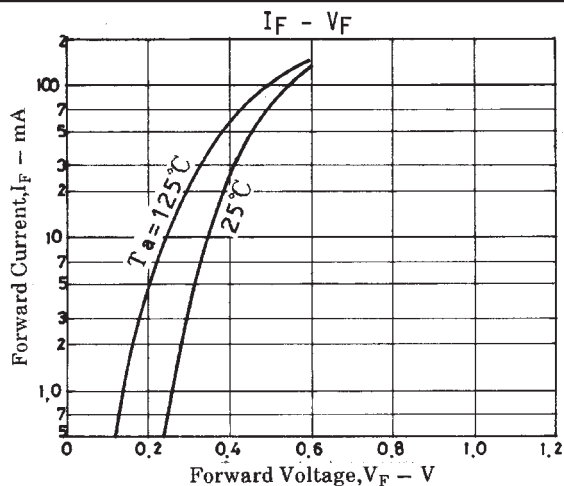
· Marking:G

t_{rr} Test Circuit



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