

SB30W03T

Schottky Barrier Diode (Twin Type · Cathod Common)

30V, 3A Rectifier

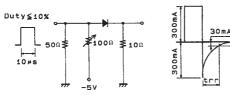
Applications

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

Features

- · Low forward voltage (V_F max=0.55V).
- \cdot Fast reverse recovery time (trr max=30ns).
- · Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

trr Test Circuit

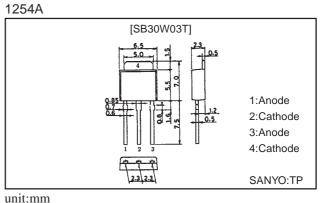


Electrical Connection

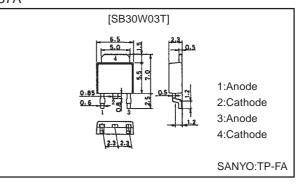


Package Dimensions

unit:mm







Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V _{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO	50Hz resistive load, Tc=106°C	3	А
	IO	50Hz resistive load, Tc=104°C, Total rating	6	А
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	20	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

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

Parameter		Conditons	Ratings			Unit
	Symbol		min	typ	max	
Reverse Voltage	VR	I _R =1mA	30			V
Forward Voltage	٧ _F	I _F =3A			0.55	V
Reverse Current	I _R	V _R =15V			200	μA
Interterminal Capacitance	С	V _R =10V, f=1MHz		160		pF
Reverse Recovery Time	trr	I _F =I _R =300mA, See specified Test Circuit.			30	ns
Thermal Resistance (Junction-Ambient)	Rth(j-a)			90		°C/W
Thermal Resistance (Junction-Case)	Rth(j-c)			5		°C/W

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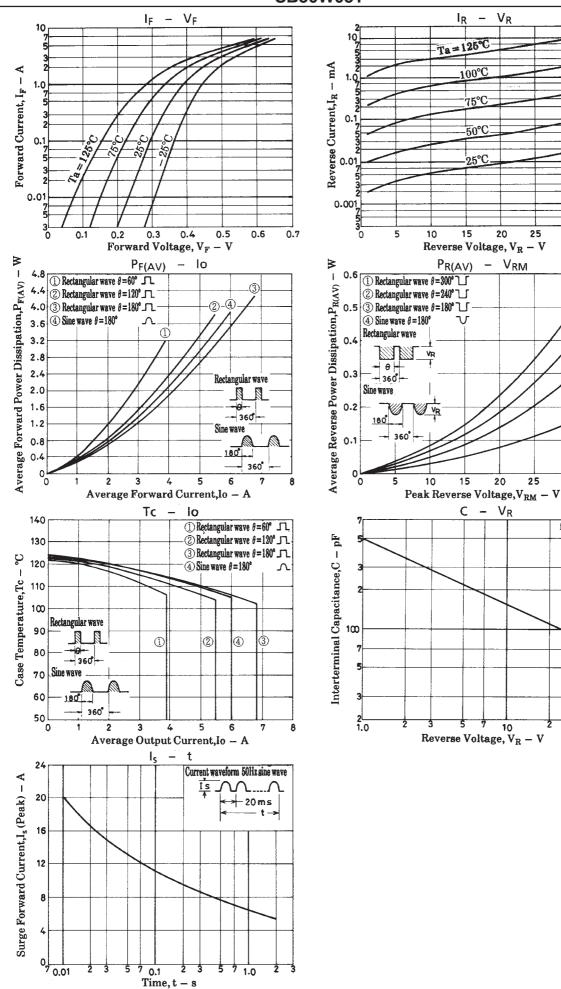
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VR

VR

(4)

f = 1 M Hz



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