

# **SB25W05T**

Schottky Barrier Diode (Twin Type - Cathode Common)

# 50V, 2.5A Rectifier

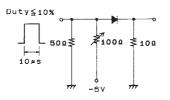
## **Applications**

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

#### **Features**

- · Low forward voltage ( $V_F$  max=0.55V).
- · Fast reverse recovery time (trr max=20ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

#### trr Test Circuit





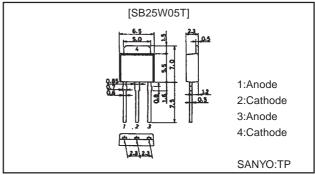
#### **Electrical Connection**



# Package Dimensions

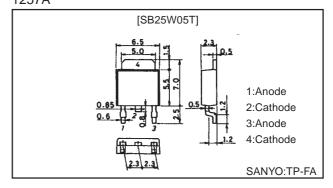
#### unit:mm

#### 1254A



unit:mm

# 1257A



## **Specifications**

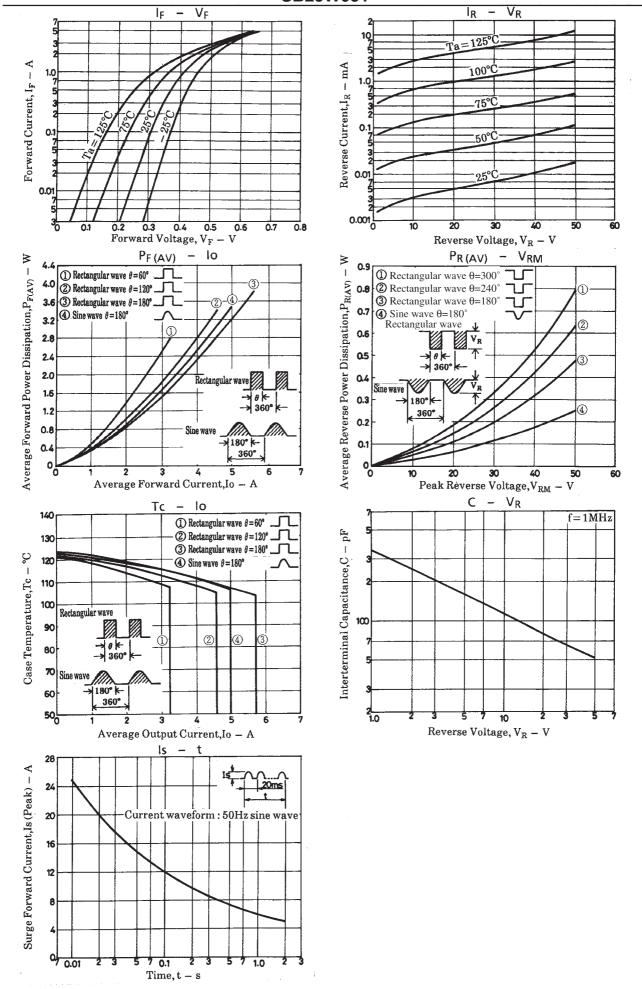
#### **Absolute Maximum Ratings at Ta = 25°C (Value per element)**

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		50	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		55	V
Average Output Current	I <sub>O</sub>	50Hz resistive load, Tc=117°C	2.5	Α
	IO	50Hz resistive load, Tc=106°C, Total rating	5	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	25	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	Symbol	Conditons		Ratings		
	Gyrribor		min	typ	max	Unit
Reverse Voltage	VR	I <sub>R</sub> =1mA	50			V
Forward Voltage	VF	I <sub>F</sub> =2.5A			0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25V			200	μA
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		120		pF
Reverse Recovery Time	trr	I <sub>F</sub> =I <sub>R</sub> =300mA, See specified Test Circuit.			20	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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#### **SB25W05T**

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