

**SB10W05T**

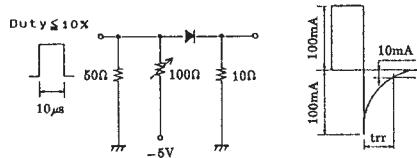
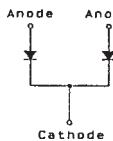
Schottky Barrier Diode (Twin Type - Cathode Common)

50V, 1A Rectifier**Applications**

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

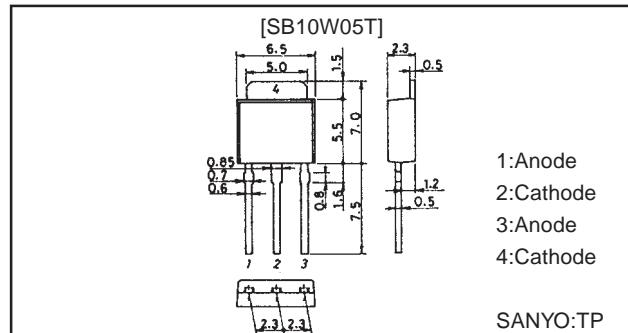
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (trr max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

trr Test Circuit**Electrical Connection****Package Dimensions**

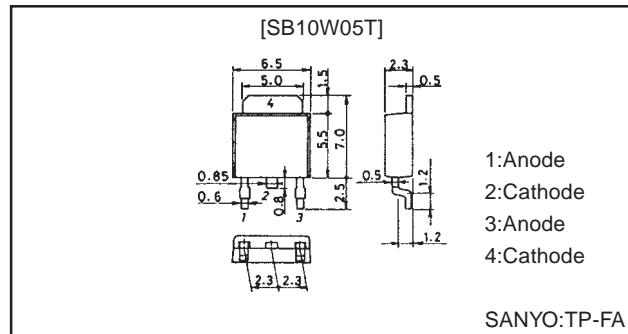
unit:mm

1254A



unit:mm

1257A

**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$ (Value per element)**

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		50	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		55	V
Average Output Current	I_O	50Hz, resistor load, $T_c=120^\circ\text{C}$	1	A
	I_O	50Hz, resistor load, $T_c=116^\circ\text{C}$, Total rating	2	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	10	A
Junction Temperature	T_j		-55 to +125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at $T_a = 25^\circ\text{C}$ (Value per element)

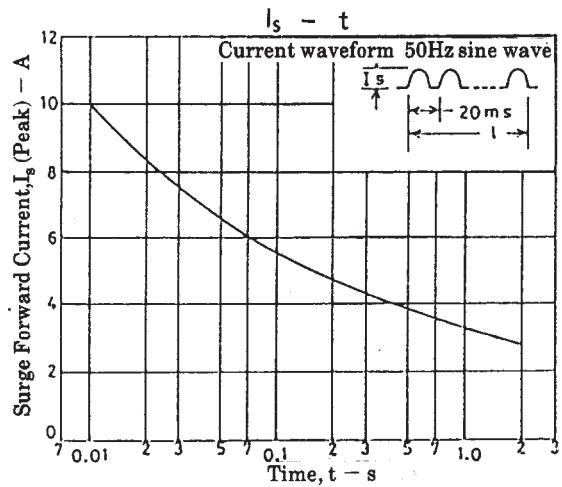
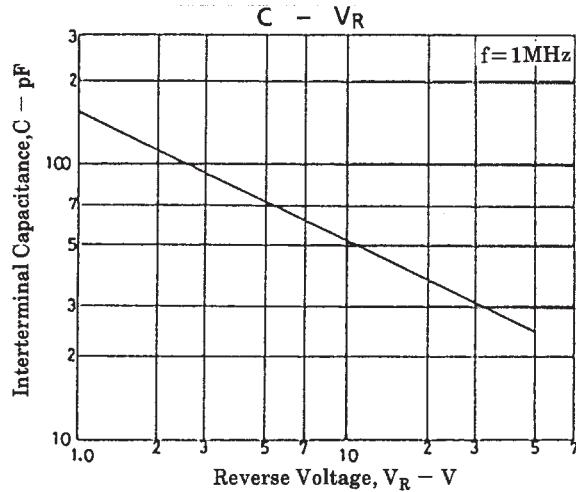
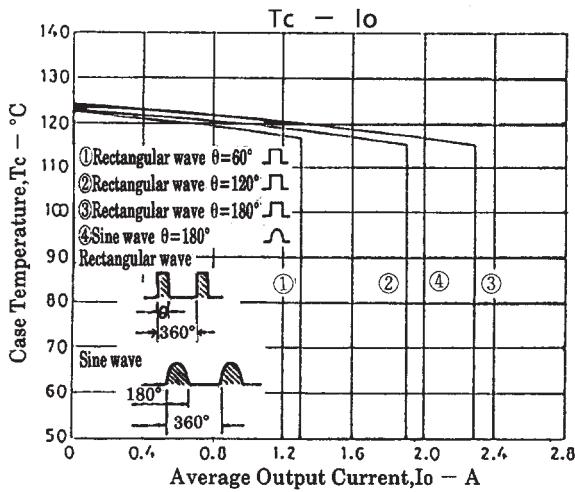
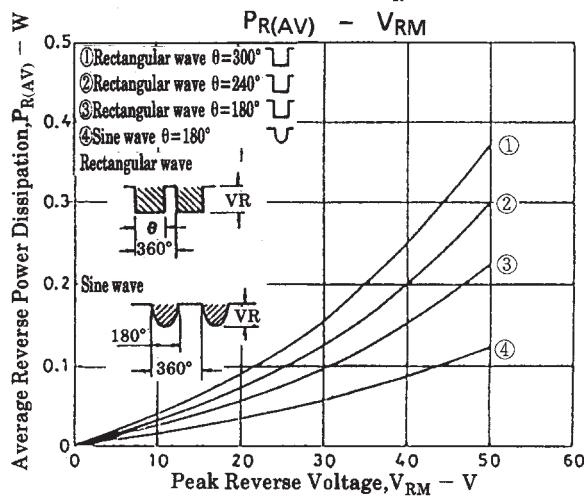
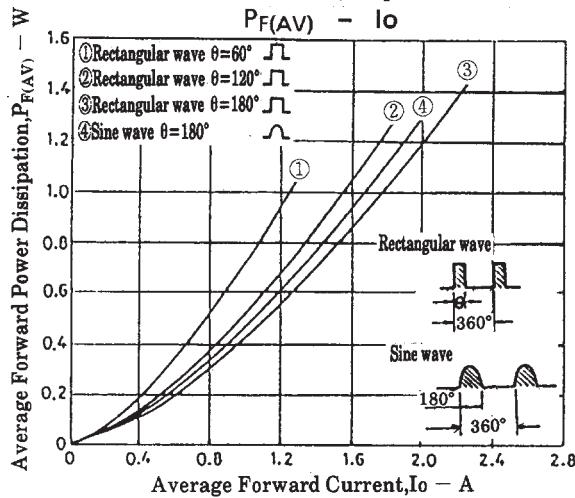
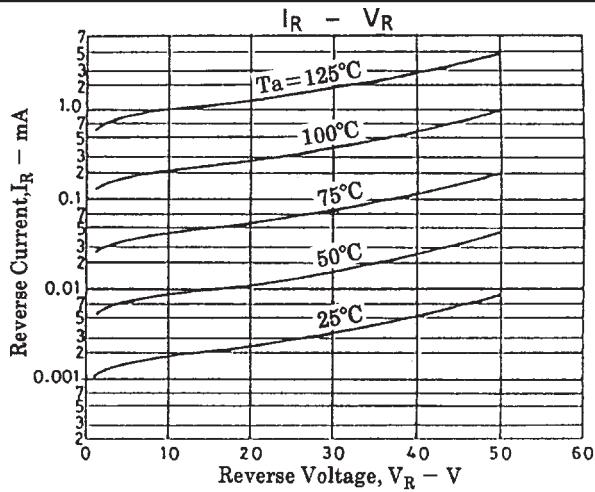
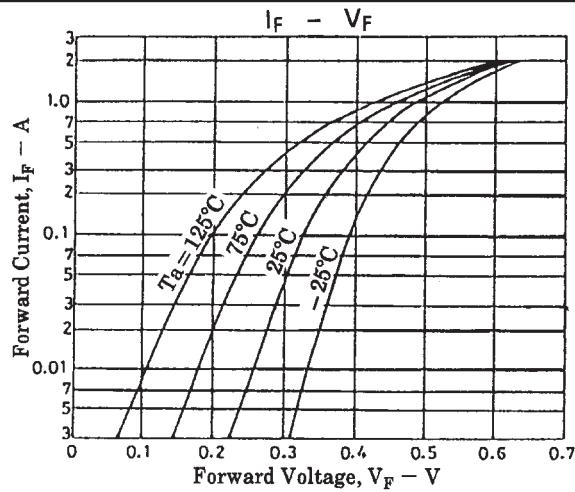
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu\text{A}$	50			V
Forward Voltage	V_F	$I_F=1\text{A}$			0.55	V
Reverse Current	I_R	$V_R=25\text{V}$			80	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		52		pF
Reverse Recovery Time	trr	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$			90		°C/W
Thermal Resistance (Junction-Case)	$R_{th(j-c)}$			6		°C/W

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

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