

Ordering number:EN4441



# SB20-05T

Schottky Barrier Diode

## 50V, 2A Rectifier

### Applications

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

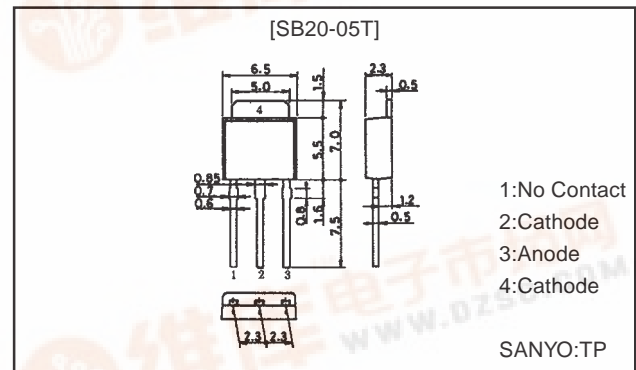
### Features

- 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.

### Package Dimensions

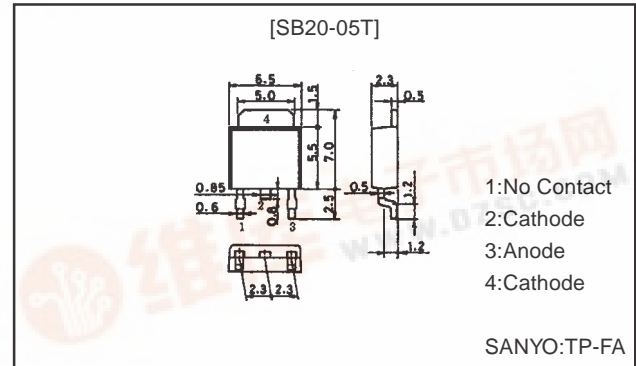
unit:mm

1255A

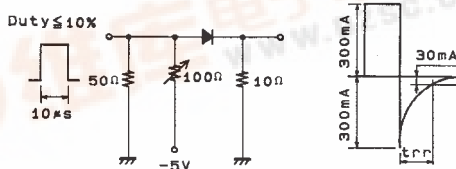


unit:mm

1256A



### trr Test Circuit



### Specifications

#### Absolute Maximum Ratings at Ta = 25°C

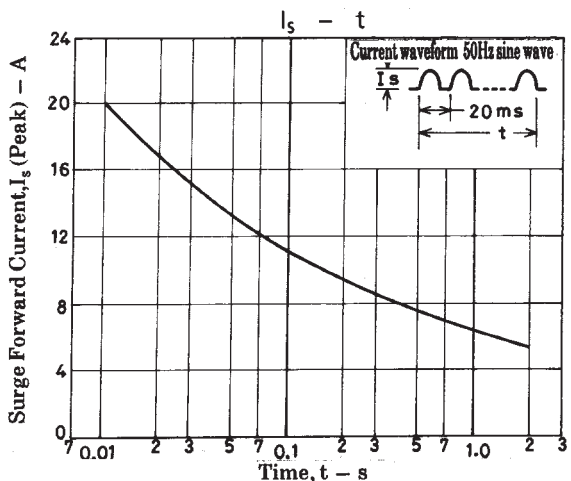
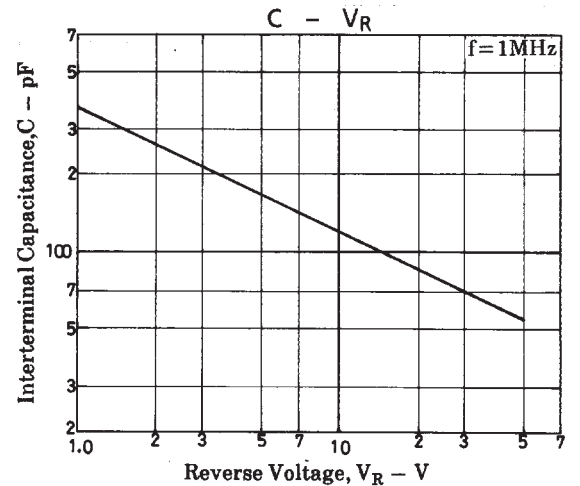
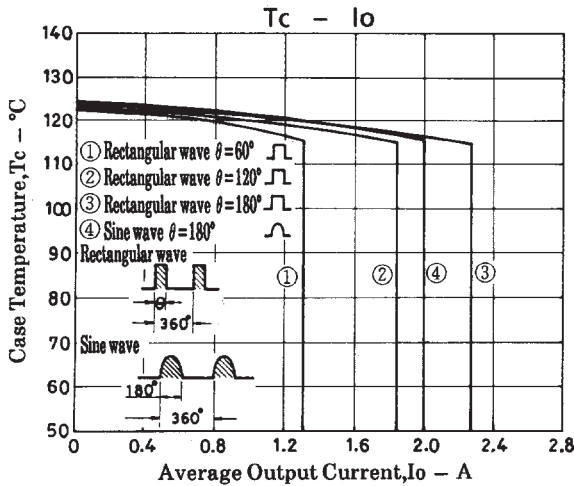
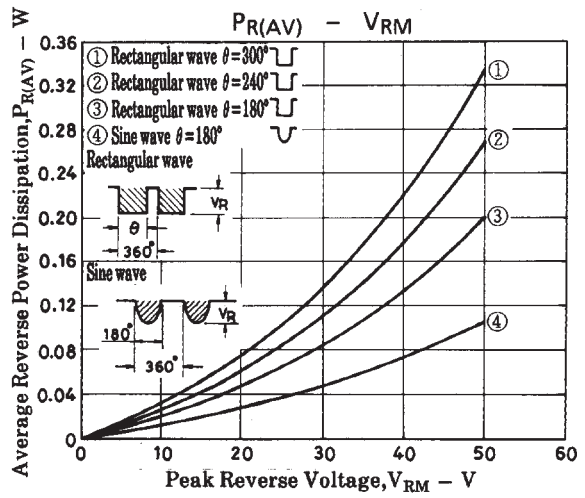
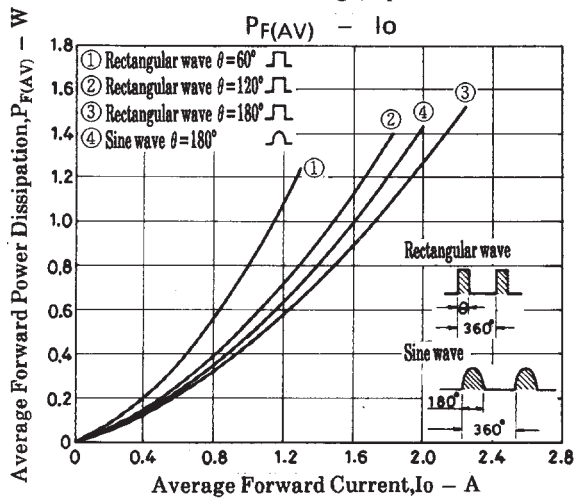
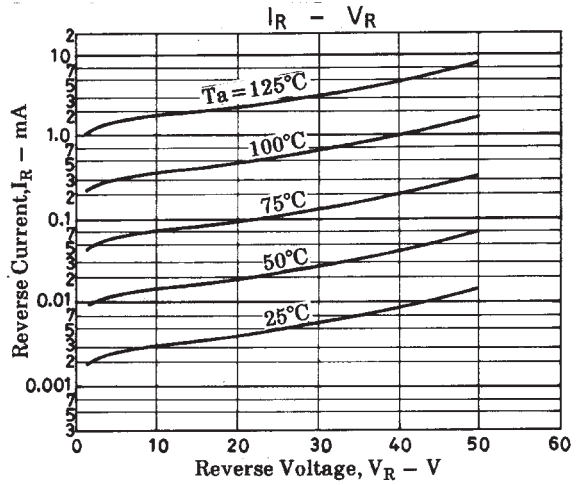
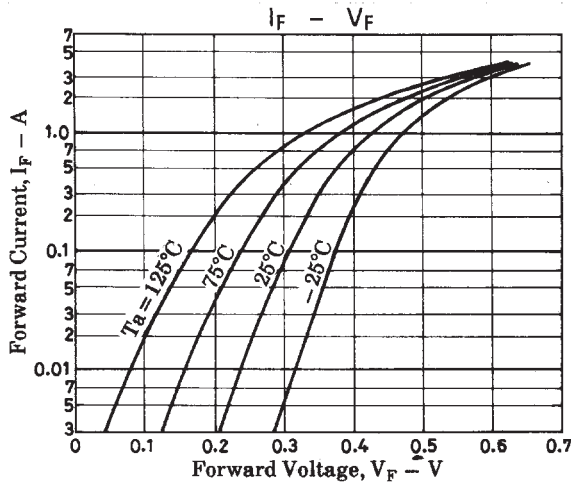
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		50	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		55	V
Average Output Current	$I_O$	50Hz, resistive load, $T_c=115^\circ\text{C}$	2	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	20	A
Junction Temperature	$T_j$		-55 to +125	°C
Storage Temperature	$T_{stg}$		-55 to +125	°C

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$	50			V
Forward Voltage	$V_F$	$I_F=2\text{A}$			0.55	V
Reverse Current	$I_R$	$V_R=25\text{V}$			200	μA
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		120		pF
Reverse Recovery Time	trr	$I_F=I_R=300\text{mA}$ , See specified Test Circuit			20	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$			90		°C/W
Thermal Resistance (Junction-Case)	$R_{th(j-c)}$			6		°C/W



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