



# SB30-03T

Schottky Barrier Diode

## 30V, 3A Rectifier

### Applications

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

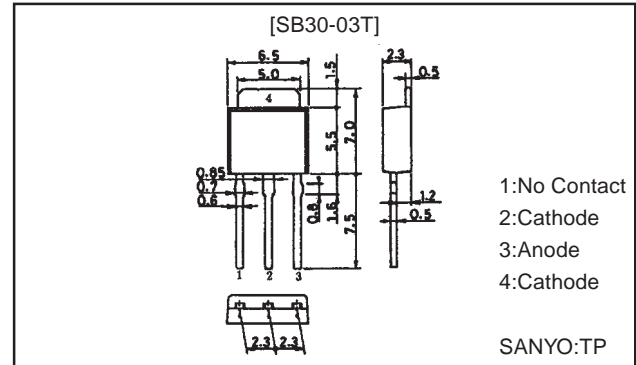
### Features

- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time ( $t_{rr}$  max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

### Package Dimensions

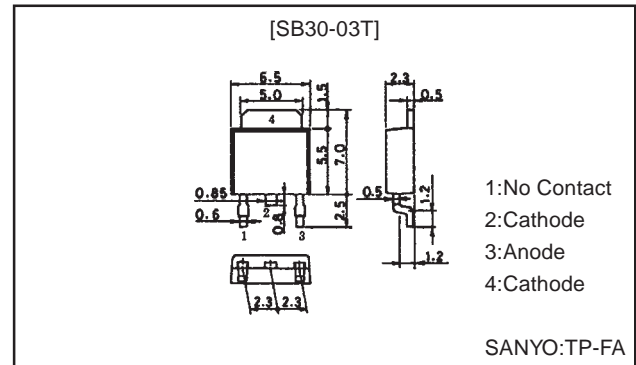
unit:mm

1255A

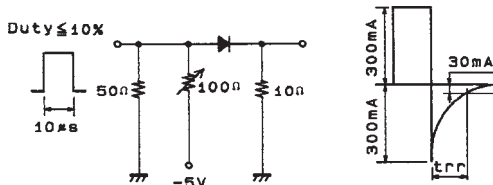


unit:mm

1256A



### t<sub>rr</sub> Test Circuit



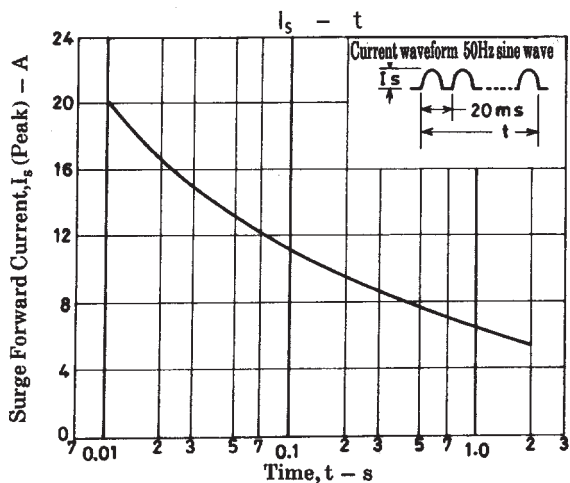
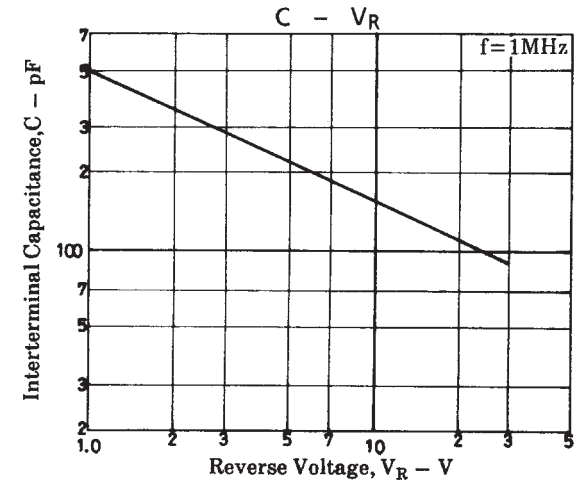
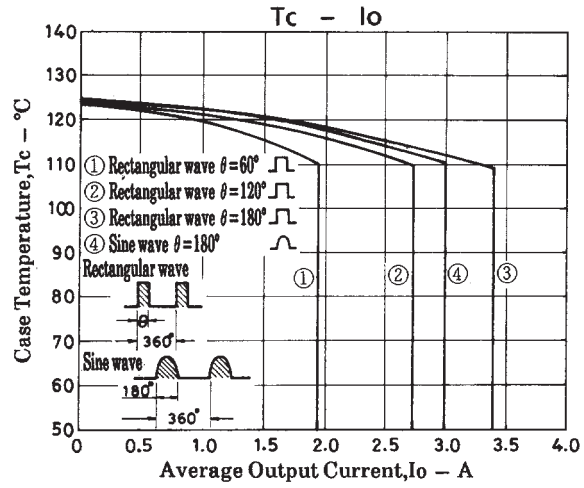
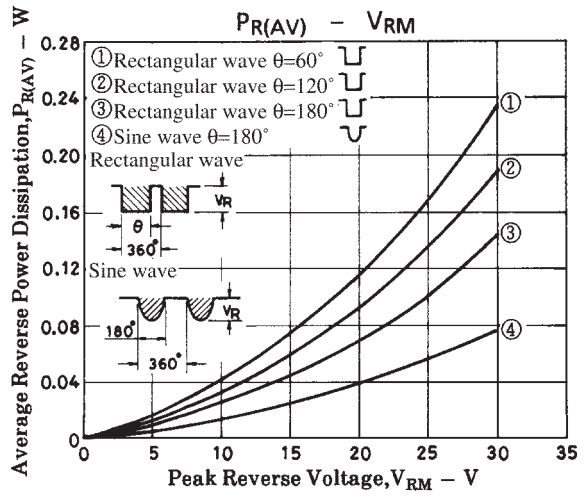
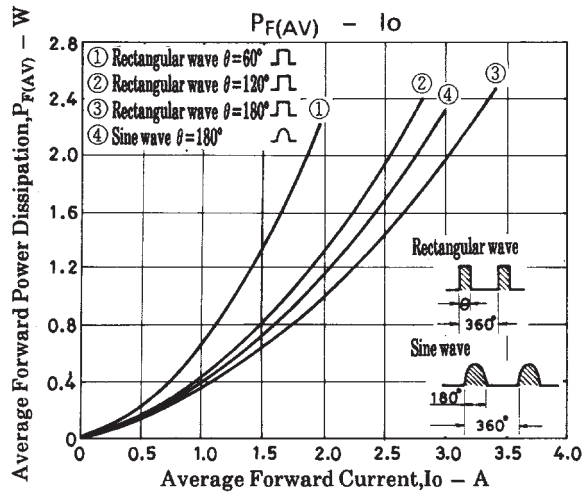
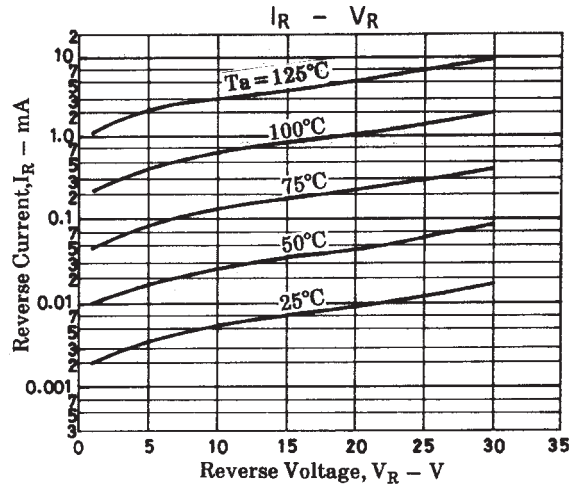
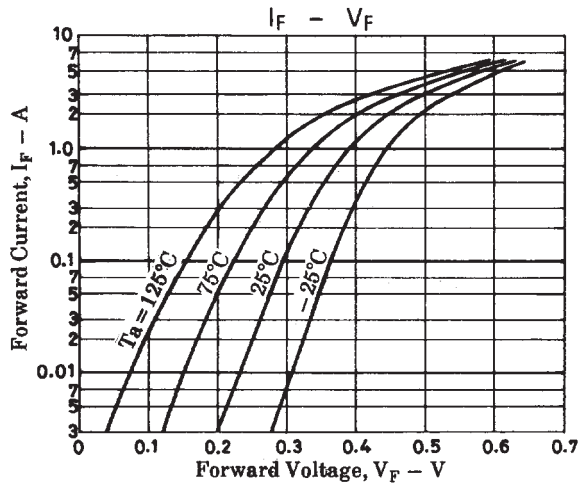
### Specifications

#### Absolute Maximum Ratings at Ta = 25°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	$I_O$	50Hz, resistive load, Tc=110°C	3	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	20	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1mA$	30			V
Forward Voltage	$V_F$	$I_F=3A$			0.55	V
Reverse Current	$I_R$	$V_R=15V$			200	µA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		160		pF
Reverse Recovery Time	t <sub>rr</sub>	$I_F=I_R=300mA$ , See specified Test Circuit			30	ns
Thermal Resistance (Junction-Ambient)	Rth(j-a)			90		°C/W
Thermal Resistance (Junction-Case)	Rth(j-c)			6		°C/W



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