



**30V, 3A Rectifier**

**Applications**

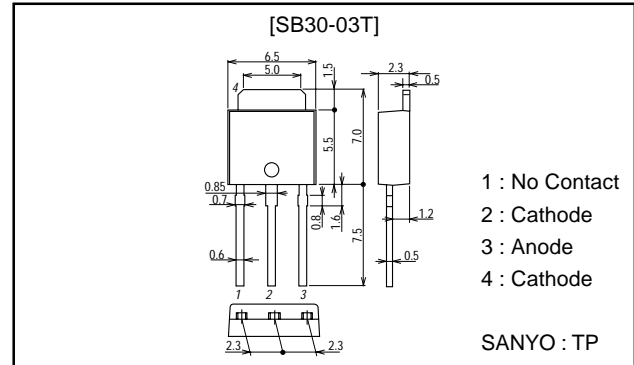
- High frequency rectification (switching regulators, converters, choppers).

**Features**

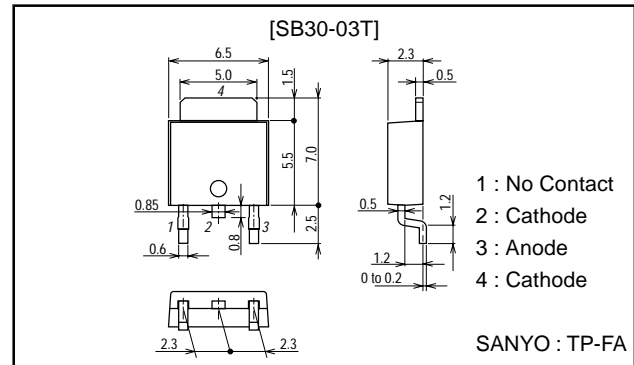
- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time ( $t_{rr}$  max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

**Package Dimensions**

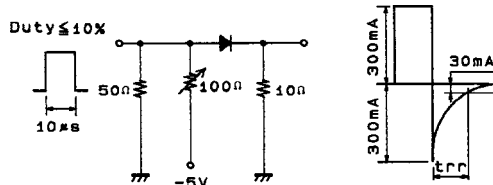
unit:mm  
1255A



unit:mm  
1256A



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



**Specifications**

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

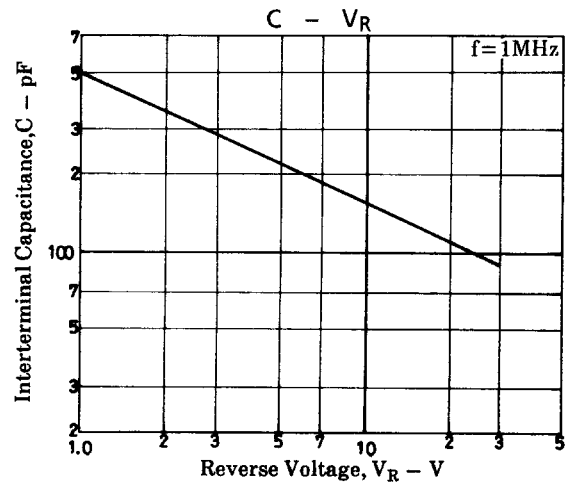
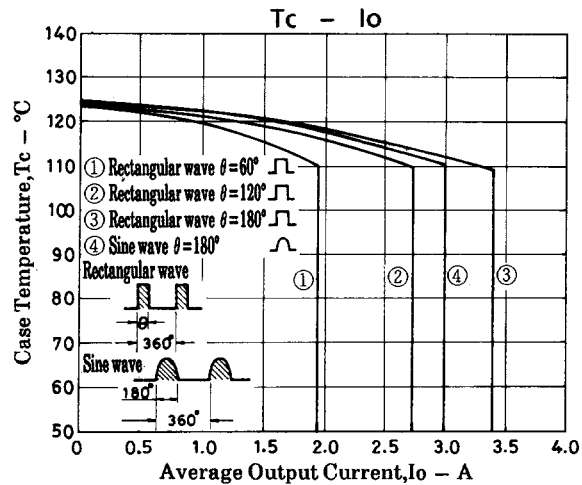
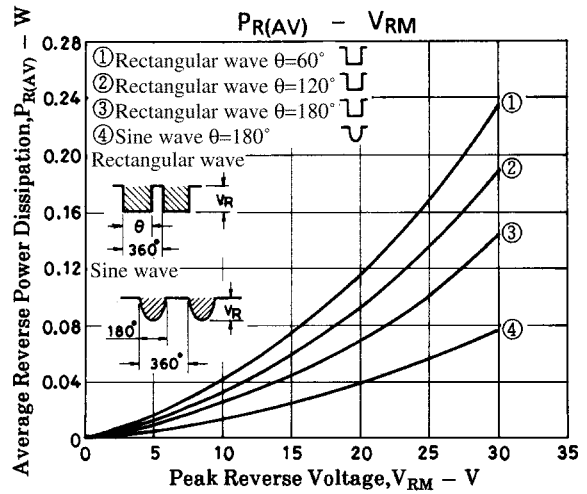
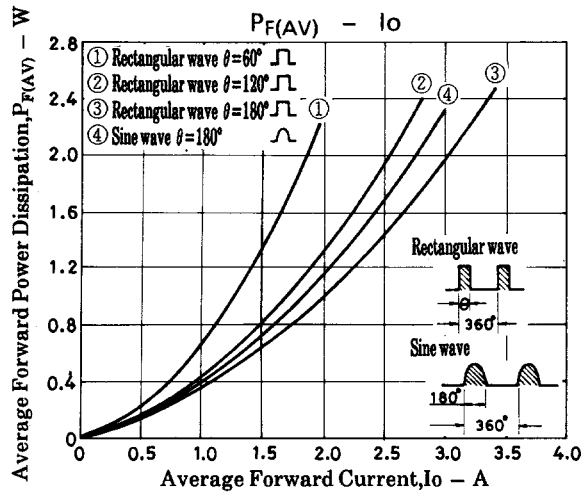
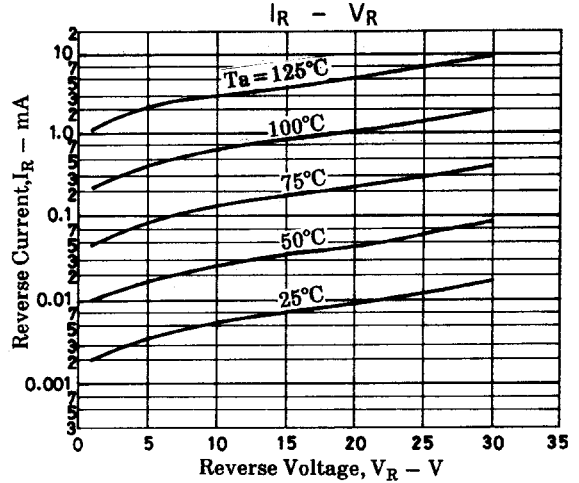
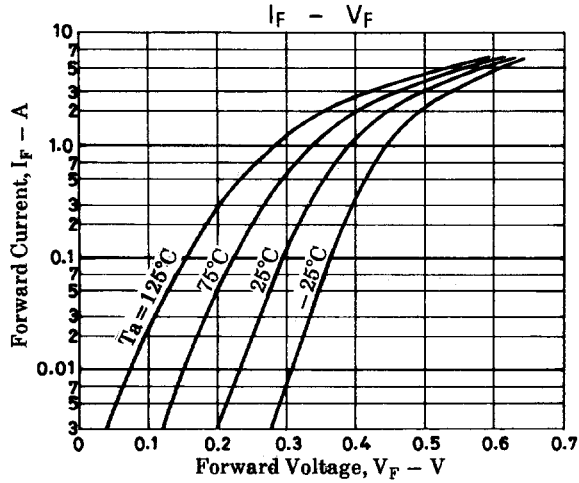
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		30	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		35	V
Average Output Current	I <sub>O</sub>	50Hz, resistive load, T <sub>c</sub> =110°C	3	A
Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, 1 cycle	20	A
Junction Temperature	T <sub>j</sub>		-55 to +125	°C
Storage Temperature	T <sub>stg</sub>		-55 to +125	°C

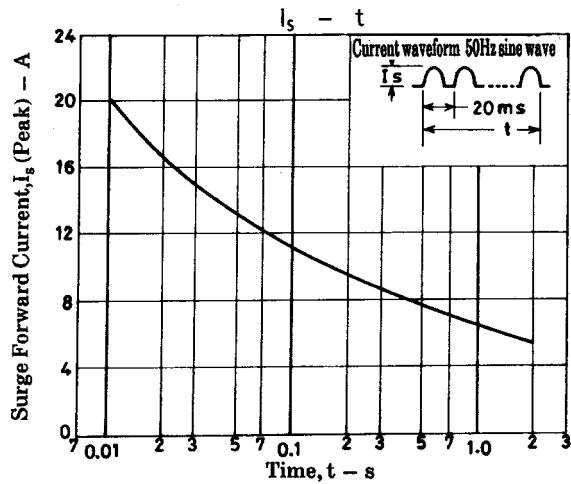
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# SB30-03T

## Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$	30			V
Forward Voltage	$V_F$	$I_F=3\text{A}$			0.55	V
Reverse Current	$I_R$	$V_R=15\text{V}$			200	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}, f=1\text{MHz}$		160		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=300\text{mA}$ , See specified Test Circuit			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$			90		$^\circ\text{C/W}$
Thermal Resistance (Junction-Case)	$R_{th(j-c)}$			6		$^\circ\text{C/W}$





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