



**THE DATASHEET OF  
SB10-03A3**





**SB10-03A2/SB10-03A3**

**30V, 1.0A 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.
- Average rectified current ( $I_o$ =1.0A).

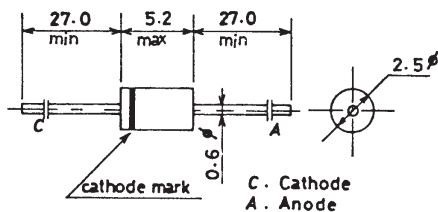
**Absolute Maximum Ratings** at  $T_a=25^\circ\text{C}$

				unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		30	V
		Nonrepetitive Peak Reverse	$V_{RSM}$	35
Surge Voltage				
Average Rectified Current	$I_o$	SB10-03A2	1.0	A
		50Hz, resistive load, sine wave, $T_a=50^\circ\text{C}$ (L=8mm, $10 \times 10\text{mm}^2$ print land)		
Surge Forward Current	$I_{FSM}$	SB10-03A3	1.0	A
		50Hz, resistive load, sine wave, $T_a=46^\circ\text{C}$ (L=3mm, $5 \times 5\text{mm}^2$ print land)		
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	40	A
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-40 to +125	$^\circ\text{C}$

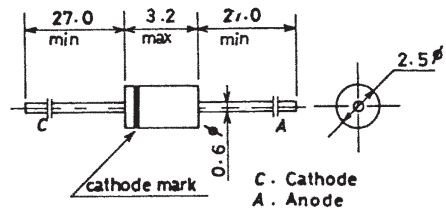
**Electrical Characteristics** at  $T_a=25^\circ\text{C}$

			min	typ	max	unit
Forward Voltage	$V_F$	$I_F=1.0\text{A}$			0.55	V
Reverse Current	$I_R$	$V_R=30\text{V}$			1.0	mA
Reverse Recovery Time	$t_{rr}$	$I_{FM}=1\text{A}$ , $-di/dt=50\text{A}/\mu\text{s}$			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$	No fin, device only			140	$^\circ\text{C}/\text{W}$

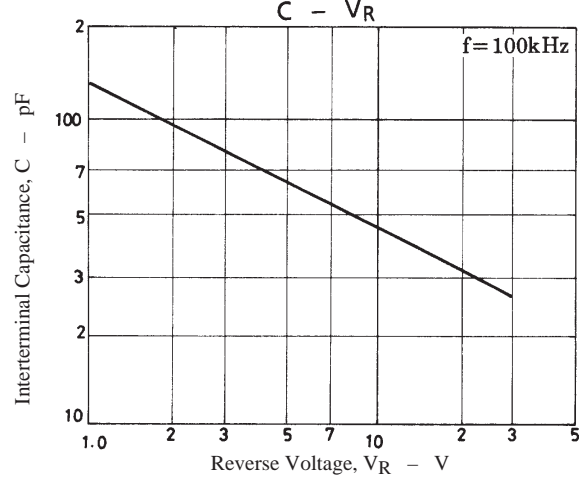
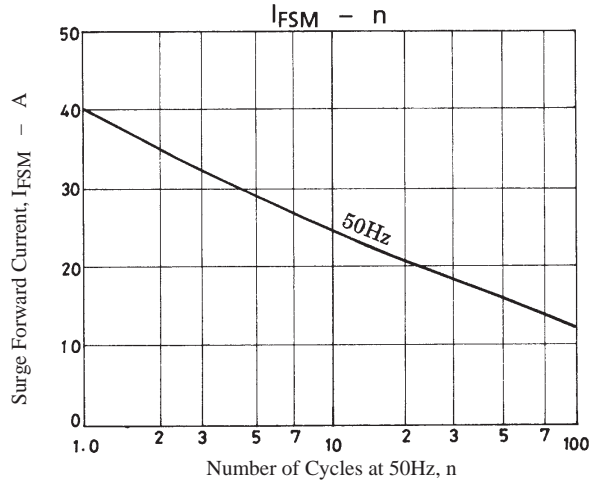
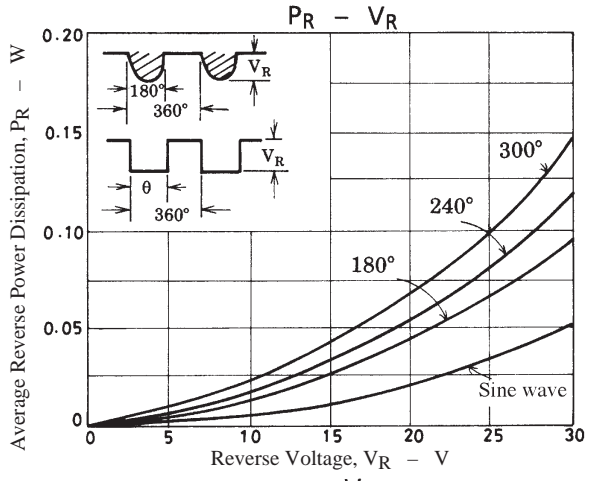
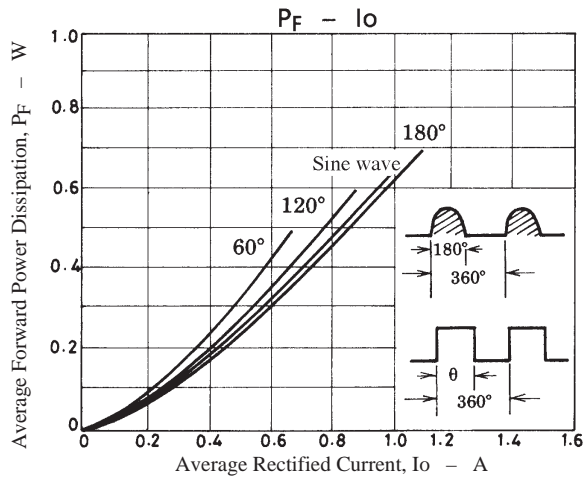
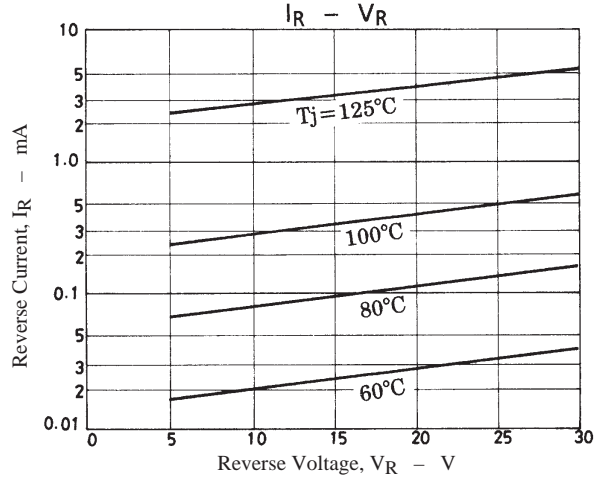
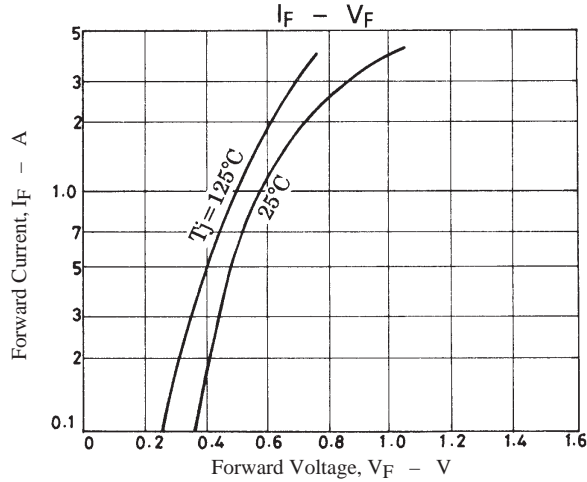
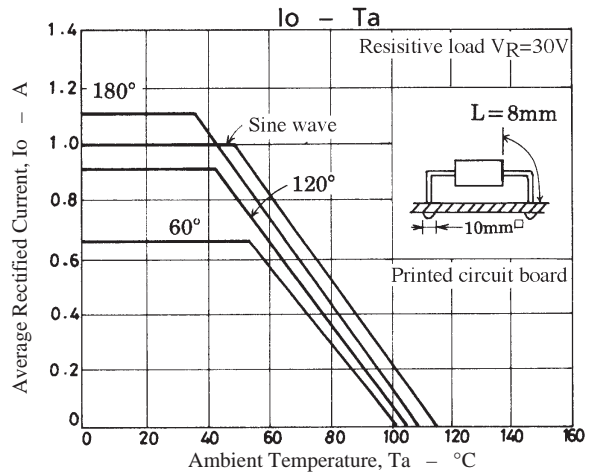
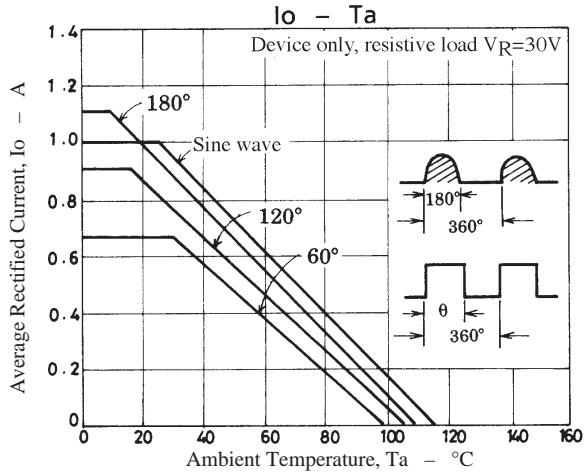
[SB10-03A2]  
**Package Dimensions** 1208  
(unit : mm)



[SB10-03A3]  
**Package Dimensions** 1209  
(unit : mm)



SB10-03A2/SB10-03A3





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