



**THE DATASHEET OF  
SB10-03A3-BT**





# 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).

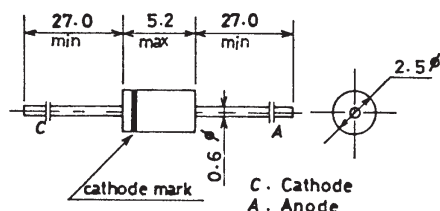
### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

				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)		
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-40 to +125	$^\circ\text{C}$

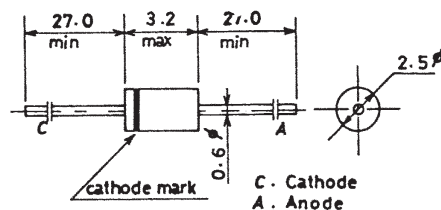
### Electrical Characteristics at $T_a=25^\circ\text{C}$

			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	$^\circ\text{C}/\text{W}$

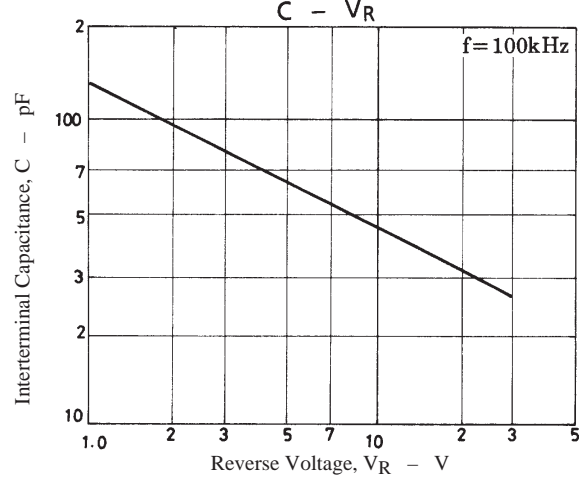
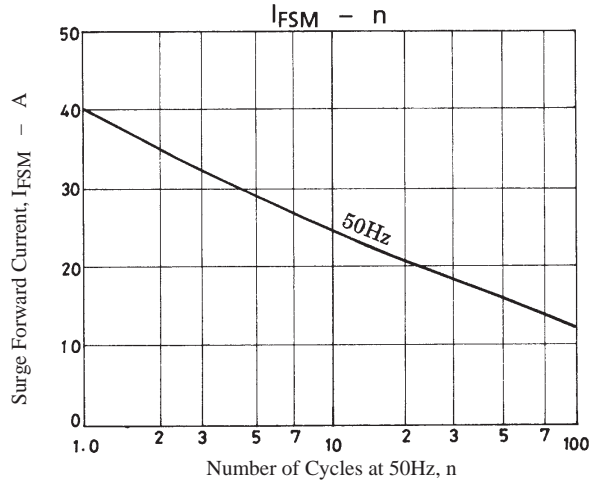
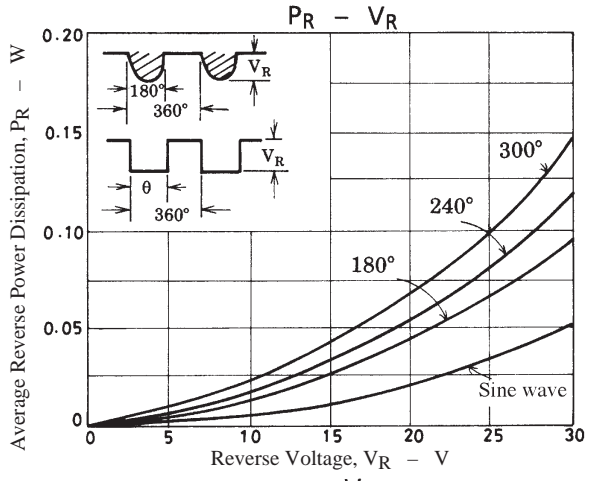
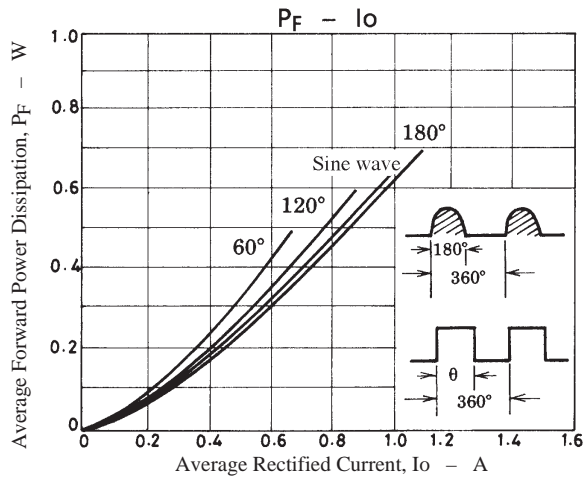
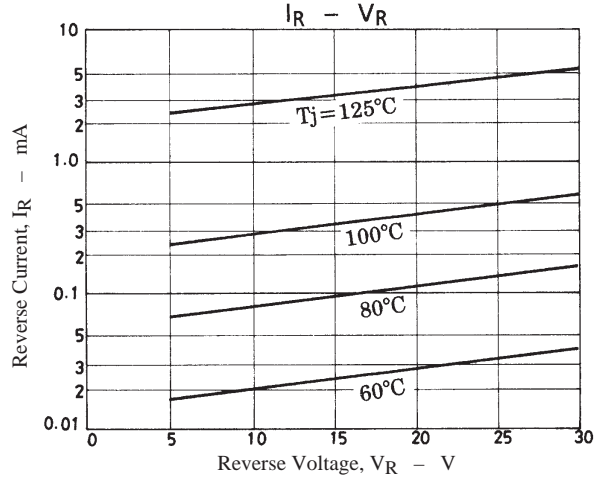
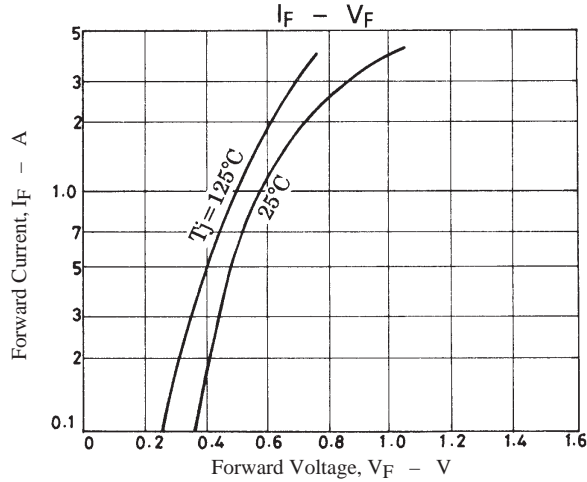
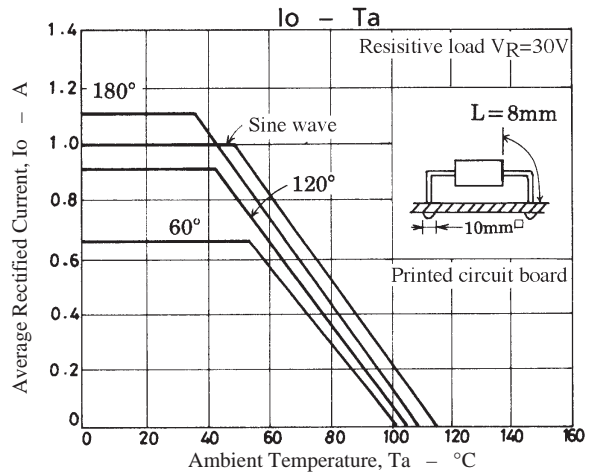
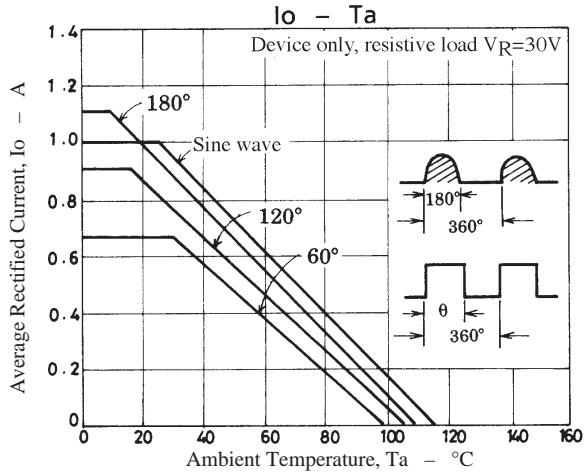
[SB10-03A2]  
**Package Dimensions** 1208  
 (unit : mm)



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



SB10-03A2/SB10-03A3



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of October, 1997. Specifications and information herein are subject to change without notice.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SB10-03A3-BT on WIN SOURCE](#)
- ⊖ [ON Semiconductor Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management