

SB10-03A2/SB10-03A3**SANYO****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 $T_a=25^\circ C$

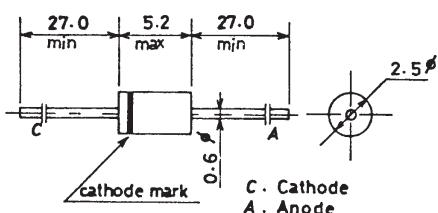
| | | | 30 | unit |
|---------------------------------|-----------|---|-------------|------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 30 | V |
| Nonrepetitive Peak Reverse | V_{RSM} | | 35 | V |
| Surge Voltage | | | | |
| Average Rectified Current | I_o | SB10-03A2 | 1.0 | A |
| | | 50Hz, resistive load, sine wave, $T_a=50^\circ C$ ($L=8mm$, $10\times10mm^2$ print land) | | |
| | | SB10-03A3 | 1.0 | A |
| | | 50Hz, resistive load, sine wave, $T_a=46^\circ C$ ($L=3mm$, $5\times5mm^2$ print land) | | |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 40 | A |
| Junction Temperature | T_j | | 125 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -40 to +125 | $^\circ C$ |

Electrical Characteristics at $T_a=25^\circ C$

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

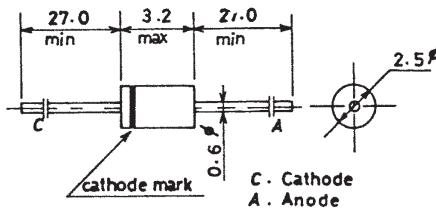
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Package Dimensions 1208
(unit : mm)



[SB10-03A3]

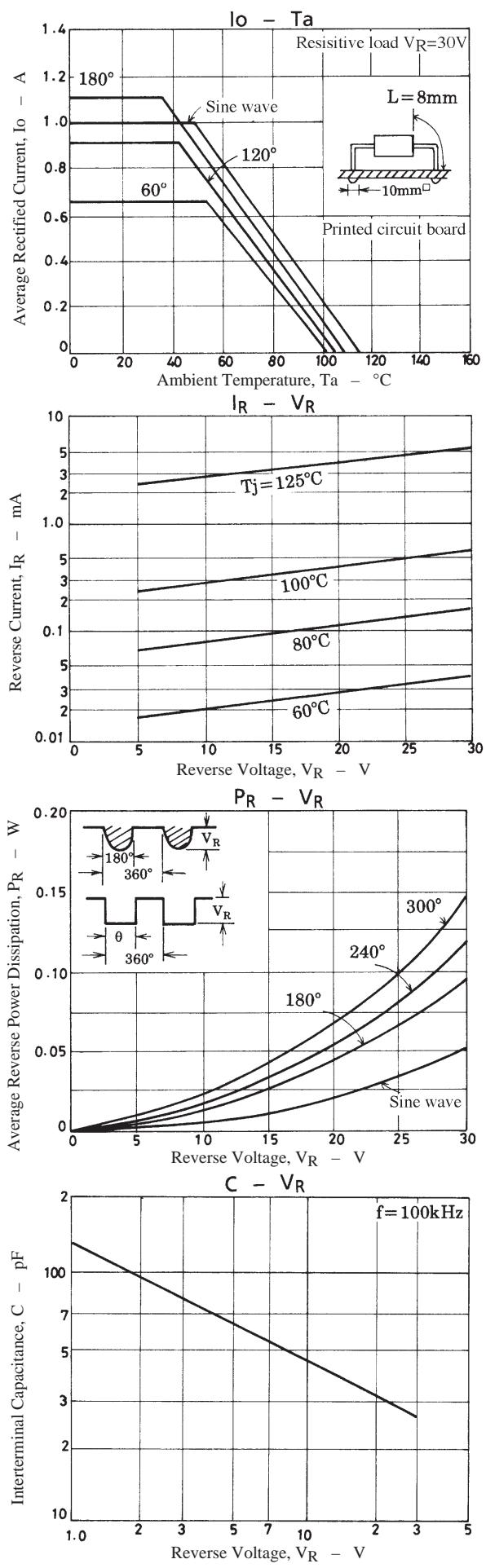
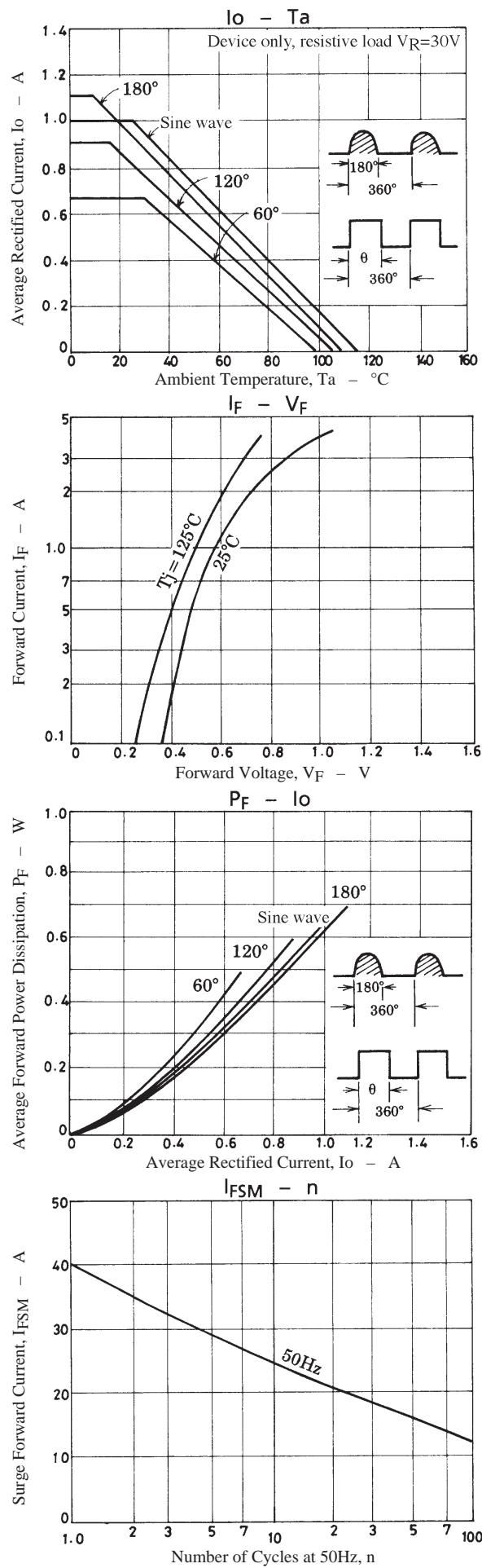
Package Dimensions 1209
(unit : mm)

**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

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