

Power Schottky Barrier Diodes (For Large-Signal Use)

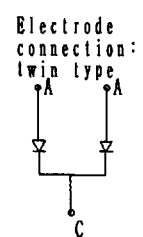
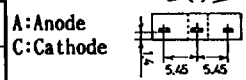
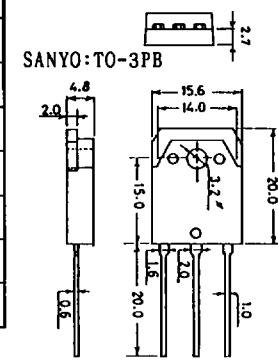
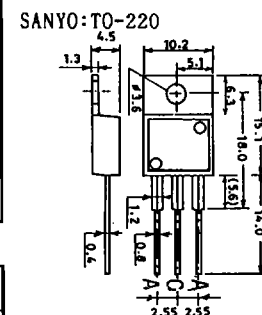
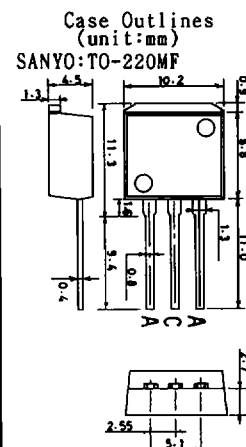
Sanyo Schottky barrier diodes (SBD) have been developed by our original technology. They are available for making sets smaller in size and lighter in weight. Sanyo power SBDs with breakdown voltages of 50V, 90V and 180V can be applied to various uses.

Features

- ☆ High reliability because of planar structure.
- ☆ Very low forward voltage.
- ☆ Low switching noise.
- ☆ We have a product line with breakdown voltages of 50V, 90V and 180V.

50V Series (T_a = 25 °C)

| Type No. | Package | Absolute Maximum Ratings | | | Electrical Characteristics | | | | | | |
|-----------|----------|--------------------------|-----------------------|-------------------------|----------------------------|---------------------------|-----------------------|----------------------------|-----------------------|-----------------------------|------------------------------|
| | | V _{RRM} (V) | I _O (A) | I _{FSM} (A) | I _F (A) | V _F max (V) | V _R (V) | I _R max (mA) | I _F (A) | t _{rr} max (nS) | R _{thj-c} (°C/W) |
| SB60-05K | TO-220MF | -50 | 6 | 100 | 3 | 0.55 | -25 | -0.3 | 2 | 50 | 3.0 |
| SB20-05H | TO-220 | | 2 | 60 | 1 | | | -0.1 | | 30 | 5.0 |
| SB40-05H | | | 4 | 80 | 2 | | | -0.2 | | 40 | 4.0 |
| SB60-05H | | | 6 | 100 | 3 | | | -0.3 | | 50 | 3.0 |
| SB80-05H | | | 8 | 100 | 4 | | | -0.4 | | 60 | 2.5 |
| SB100-5H | | | 10 | 100 | 5 | | | -0.5 | | 60 | 2.5 |
| SB120-05H | TO-3PB | | 12 | 120 | 6 | | | -0.6 | | 70 | 1.5 |
| SB160-05H | | | 16 | 140 | 8 | | | -0.8 | | 75 | 1.3 |
| SB200-05H | | | 20 | 200 | 10 | | | -1.0 | | 85 | 1.1 |
| SB250-05H | | | 25 | 250 | 12.5 | | | -1.2 | | 90 | 1.0 |
| SB300-05H | | 30 | 250 | 15 | -1.5 | 90 | 1.0 | | | | |



90V Series (T_a = 25 °C)

| | | | | | | | | | | | |
|-----------|----------|-----|----|-----|-----|------|-----|------|---|----|-----|
| SB100-09K | TO-220MF | -90 | 10 | 80 | 4 | 0.85 | -45 | -0.4 | 2 | 45 | 2.5 |
| SB30-09 | TO-220 | | 3 | 40 | 1.2 | | | -0.2 | | 30 | 5.0 |
| SB50-09 | | | 5 | 60 | 2 | | | -0.2 | | 35 | 4.0 |
| SB80-09 | | | 8 | 80 | 3 | | | -0.3 | | 40 | 3.0 |
| SB100-09 | | | 10 | 80 | 4 | | | -0.4 | | 45 | 2.5 |
| SB160-09 | | | 16 | 100 | 6 | | | -0.6 | | 50 | 1.5 |
| SB200-09 | TO-3PB | | 20 | 120 | 8 | | | -0.8 | | 55 | 1.3 |
| SB250-09 | | | 25 | 160 | 10 | | | -1 | | 60 | 1.1 |
| SB300-09 | | | 30 | 180 | 12 | | | -1.2 | | 70 | 1.0 |

180V Series (T_a = 25 °C)

| | | | | | | | | | | | |
|----------|----------|------|----|-----|-----|------|-----|------|---|----|-----|
| SB10-18K | TO-220MF | -180 | 1 | 30 | 0.4 | 0.85 | -90 | -0.1 | 2 | 35 | 5.0 |
| SB50-18K | | | 5 | 60 | 2 | | | -0.4 | | 40 | 2.5 |
| SB10-18 | TO-220 | | 1 | 30 | 0.4 | | | -0.1 | | 35 | 5.0 |
| SB20-18 | | | 2 | 40 | 0.8 | | | -0.2 | | 35 | 4.0 |
| SB30-18 | | | 3 | 60 | 1.2 | | | -0.3 | | 40 | 3.0 |
| SB50-18 | | | 5 | 60 | 2.0 | | | -0.4 | | 40 | 2.5 |
| SB80-18 | | | 8 | 80 | 3.0 | | | -0.6 | | 40 | 1.5 |
| SB100-18 | TO-3PB | | 10 | 100 | 4.0 | | | -0.8 | | 45 | 1.3 |
| SB120-18 | | | 12 | 120 | 5.0 | | | -1 | | 50 | 1.1 |
| SB160-18 | | | 16 | 140 | 6.0 | | | -1.2 | | 60 | 1.0 |

These specifications are subject to change without notice.