

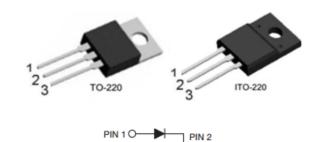
30A SCHOTTKY BARRIER RECTIFIER

Features

- Ultra Low Forward Voltage Drop
- **Excellent High Temperature Stability**
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability

Mechanical Data

- Case: TO-220AB, ITO-220AB
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208



Ordering Information

| Part No. | Package | Packing |
|-----------|-----------|--------------|
| SBL3060CT | TO-220AB | 50pcs / Tube |
| SBF3060CT | ITO-220AB | 50pcs / Tube |

Maximum Ratings (Per Leg) @TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

| Characteristic | Symbol | Value | Unit |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _{RM} | 60 | V |
| Average Rectified Output Current Per Device (Per Leg) | lo | 15 | А |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load | I _{FSM} | 200 | А |

Thermal Characteristics (Per Leg)

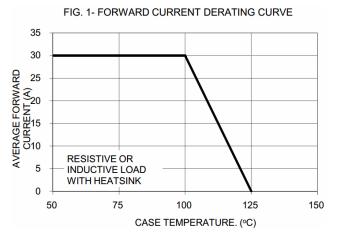
| Characteristic | Symbol | Value | Unit |
|-------------------------------------------------------------------|------------------|------------------|------|
| Typical Thermal Resistance Package = TO-220AB Package = ITO-220AB | $R_{	hetaJC}$ | 3 4.5 | °C/W |
| Operating Junction Temperature | T_{Jmax} | 125 | °C |
| Storage Temperature Range | T _{STG} | 125, -55 to +150 | °C |

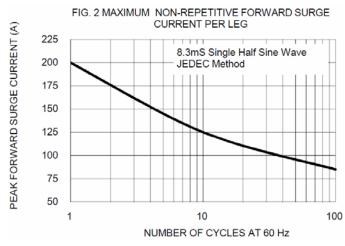
Electrical Characteristics (Per Leg) @T_A = 25°C unless otherwise specified

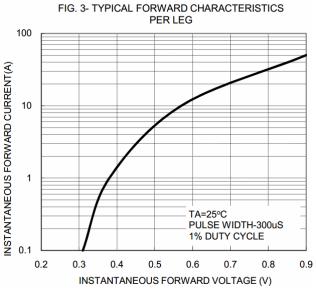
| Characteristic | Symbol | Min | Тур | Max | Unit | Test Condition |
|--------------------------|----------------|-----|-----|------------|--------|---------------------------------------------------------------------------------------------|
| Forward Voltage Drop | V _F | - | - | 0.7 0.6 | V V | I _F = 15A, T _J = 25°C I _F = 15A, T _J = 125°C |
| Leakage Current (Note 1) | I _R | - | - | 0.3 50 | mA | V _R = 60V, T _J = 25°C V _R = 60V, T _J = 100°C |

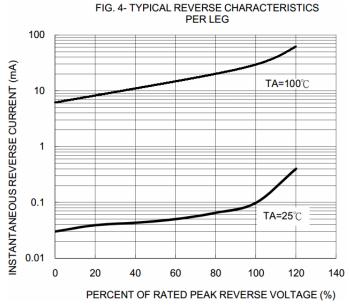
Notes: 1. Short duration pulse test used to minimize self-heating effect.





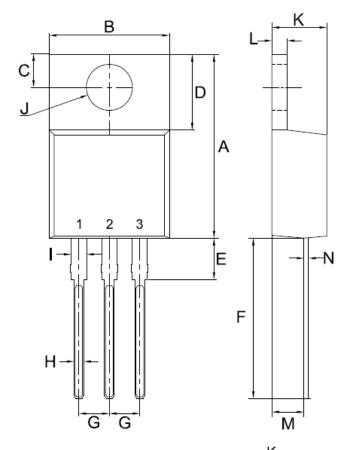




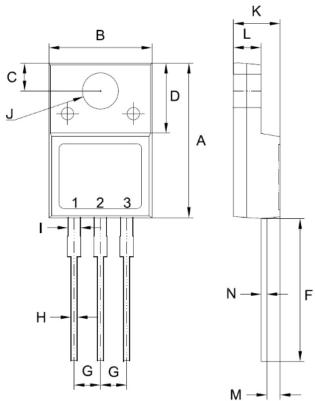




Package Outline Dimensions



| TO-220AB | | | | |
|----------|----------------|----------------|--|--|
| Unit:mm | | | | |
| DIM | MIN | MAX | | |
| A | 14. 80 | 15. 80 | | |
| В | 9. 57 | 10. 57 | | |
| С | 2. 54 | 2. 94 | | |
| D | 5. 80 | 6.80 | | |
| Е | 2. 95 | 3. 95 | | |
| F | 12.70 | 13. 40 | | |
| G | 2. 34 | 2. 74 | | |
| Н | 0.51 | 1. 11 | | |
| Ι | 0. 97 | 1. 57 | | |
| J | 3. 54 ø | 4. 14 ø | | |
| K | 4. 27 | 4.87 | | |
| L | 1.07 | 1.47 | | |
| M | 2. 03 | 2. 92 | | |
| N | 0.30 | 0.64 | | |



| ITO-220AB Unit:mm | | | | | |
|-------------------|-------|-------|--|--|--|
| D I M | MIN | MAX | | | |
| Α | 14.50 | 15.50 | | | |
| В | 9.50 | 10.50 | | | |
| С | 2.50 | 2.90 | | | |
| D | 6.30 | 7.30 | | | |
| Е | 3.30 | 4.30 | | | |
| F | 13.00 | 14.00 | | | |
| G | 2.35 | 2.75 | | | |
| Н | 0.30 | 0.90 | | | |
| 1 | 0.90 | 1.50 | | | |
| J | 3.20 | 3.80 | | | |
| K | 4.24 | 4.84 | | | |
| L | 2.52 | 2.92 | | | |
| М | 1.09 | 1.49 | | | |
| N | 0.47 | 0.63 | | | |



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