

Schottky Barrier Rectifier

SBR60A150CT

FEATURES

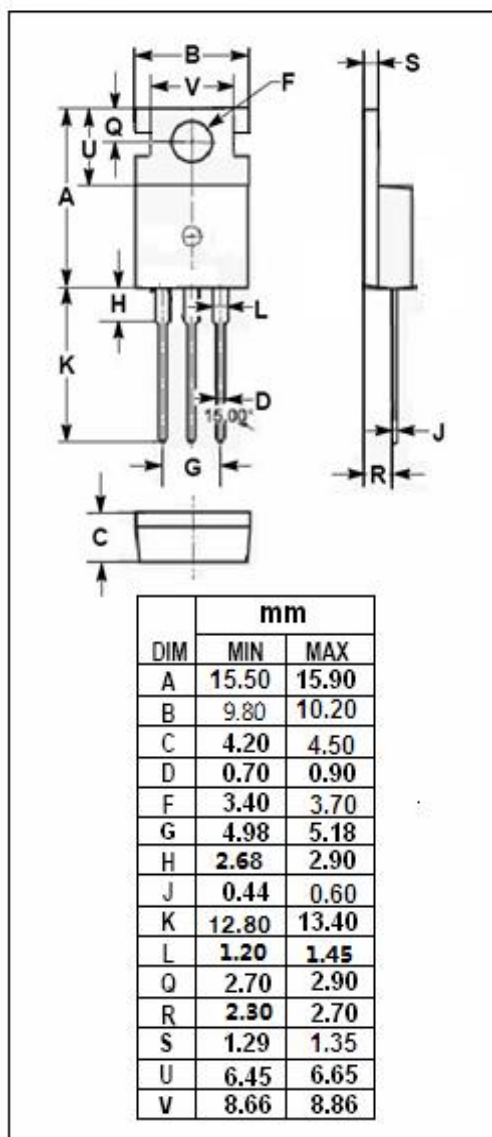
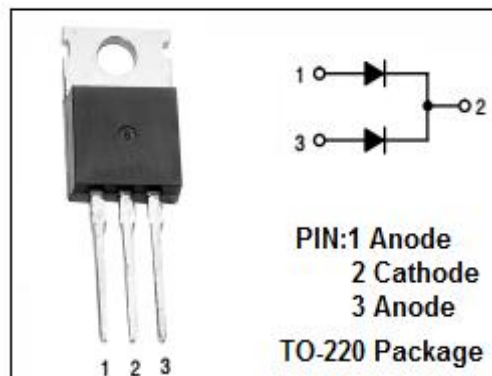
- With TO-220 packaging
- Soft, fast switching capability
- Low forward voltage drop
- Low leakage current
- High frequency operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Converters
- Free-wheeling diodes
- Reverse battery protection
- Center tap configuration

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

| SYMBOL | PARAMETER | | VALUE | UNIT |
|---------------------------------|--|------------------|----------|--------------------|
| V_{RRM} V_{RMS} V_R | Peak repetitive reverse voltage RMS voltage DC blocking voltage | | 150 | V |
| $I_{F(AV)}$ | Average rectified forward current | Per Leg Total | 30 60 | A |
| I_{FSM} | Nonrepetitive peak surge current (8.3ms single half sine-wave superimposed on rated load conditions) | | 350 | A |
| T_J | Junction temperature | | -65~175 | $^{\circ}\text{C}$ |
| T_{stg} | Storage temperature range | | -65~175 | $^{\circ}\text{C}$ |



Schottky Barrier Rectifier**SBR60A150CT****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|------|
| $R_{th\ j-c}$ | Thermal resistance, junction to case | 2.0 | °C/W |

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------|---|---|--------------|------|
| V_F | Maximum instantaneous forward voltage | $I_F = 30A; T_c = 25^\circ C$ $I_F = 30A; T_c = 125^\circ C$ | 0.93 0.77 | V |
| I_R | Maximum instantaneous reverse current (Short duration pulse test used to minimize self-heating effect) | $V_R = \text{rated } V_{RRM}; T_c = 25^\circ C$ $V_R = \text{rated } V_{RRM}; T_c = 125^\circ C$ | 0.1 10 | mA |
| t_{rr} | Reverse recovery time | $I_F = 0.5A; I_R = 1A; I_{RR} = 0.25A$ | 50 | ns |

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