

Schottky Barrier Rectifier

DSA30C200PB

FEATURES

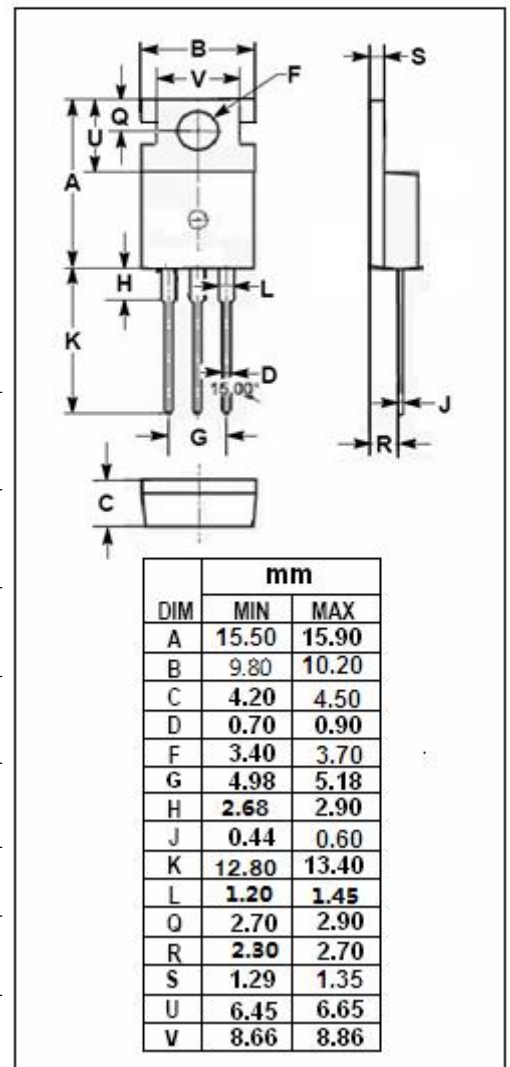
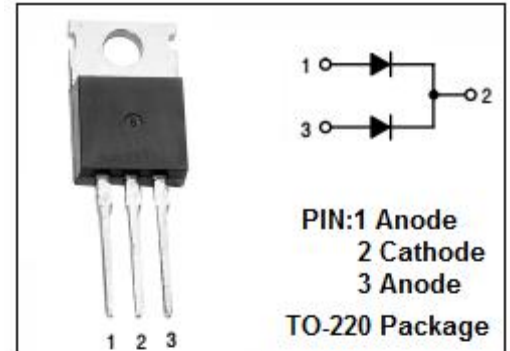
- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majonty carrier conduction
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For use in low voltage ,high frequency inverters,free wheeling and polarity protection applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|--------|
| VRRM VRWM VR | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 200 | V |
| VR(RMS) | RMS Reverse Voltag | 140 | V |
| IF(AV) | Average Rectified Forward Current | 30 | A |
| IFSM | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions | 320 | A |
| TJ | Junction Temperature | -55~150 | ℃ |
| Tstg | Storage Temperature Range | -55~150 | ℃ |
| dv/dt | Voltage Rate of Change (Rated VR) | 10,000 | V/ μ s |



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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 | $I_F = 15A ; T_c = 25^\circ C$ | 0.94 | V |
| | | $I_F = 15A ; T_c = 125^\circ C$ | 0.78 | |
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 30A ; T_c = 25^\circ C$ | 1.1 | V |
| | | $I_F = 30A ; T_c = 125^\circ C$ | 0.95 | |
| I_R | Maximum Instantaneous Reverse Current | $V_R = V_{RWM} ; T_c = 25^\circ C$ | 0.25 | mA |
| | | $V_R = V_{RWM} ; T_c = 125^\circ C$ | 2.5 | |

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