

isc N-Channel MOSFET Transistor
IRFB3207ZG
FEATURES

- Drain Current : $I_D = 120A @ T_C = 25^\circ C$
- Drain Source Voltage
: $V_{DSS} = 75V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 4.1m\Omega (\text{Max}) @ V_{GS} = 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

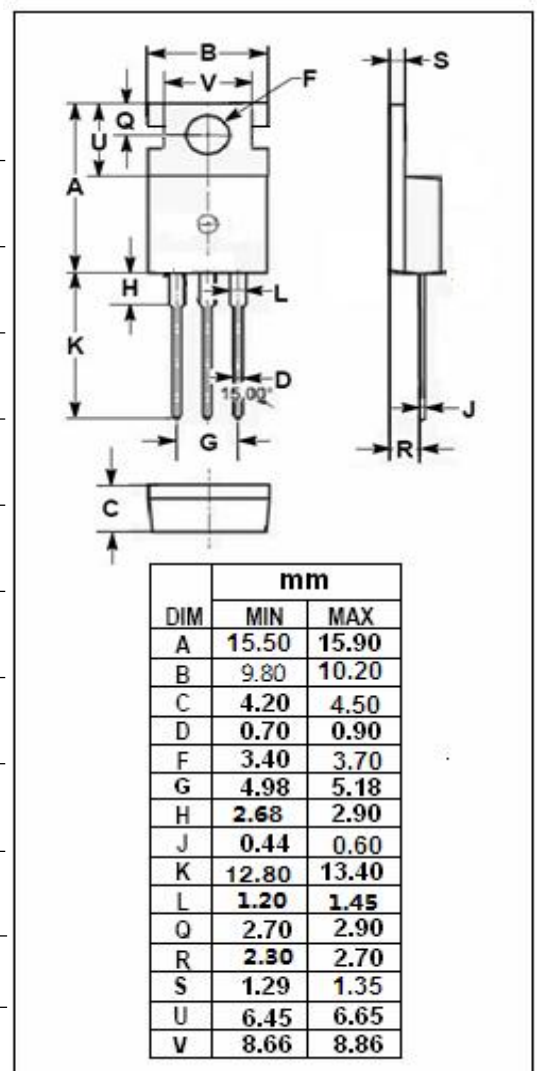
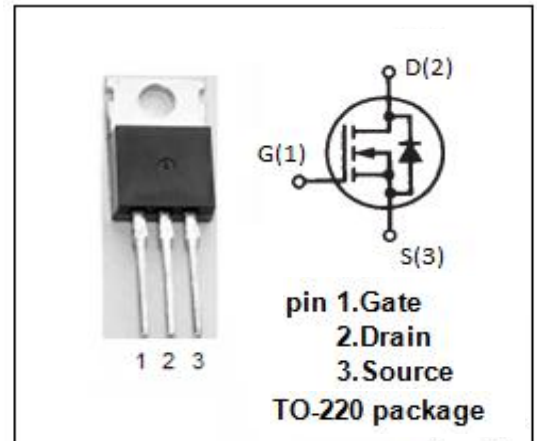
- reliable device for use in a wide variety of applications

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--|----------|------------|
| V_{DSS} | Drain-Source Voltage | 75 | V |
| V_{GS} | Gate-Source Voltage | ± 20 | V |
| I_D | Drain Current-Continuous | 120 | A |
| I_{DM} | Drain Current-Single Pulsed | 670 | A |
| P_D | Total Dissipation @ $T_C = 25^\circ C$ | 300 | W |
| T_j | Max. Operating Junction Temperature | 175 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~175 | $^\circ C$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|----------------|------------------------------------|-----|--------------|
| $R_{th(ch-c)}$ | Channel-to-case thermal resistance | 0.5 | $^\circ C/W$ |



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------------|--------------------------------|--|-----|------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D =250 μ A | 75 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =150 μ A | 2 | 4 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} =10V; I _D =75A | | 4.1 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} =±20V | | ±0.1 | μ A |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} =75V; V _{GS} = 0V | | 20 | μ A |
| V _{SD} | Diode forward voltage | I _S =75A, V _{GS} = 0V | | 1.3 | V |

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