

isc N-Channel MOSFET Transistor

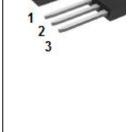
IRFU4620

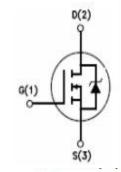
• FEATURES

- With TO-251(IPAK) packaging
- · High speed switching
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



- Power supply
- DC-DC converters
- Motor control
- · Switching applications





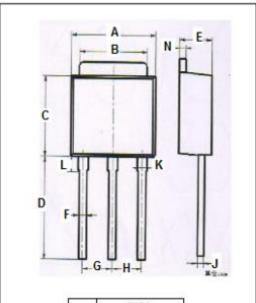
IPAK TO-251 Package

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--------------------------------|---------|------------------------|
| V _{DSS} | Drain-Source Voltage | 200 | V |
| V _{GSS} | Gate-Source Voltage | ±20 | V |
| I _D | Drain Current-Continuous | 24 | А |
| I _{DM} | Drain Current-Single Pulsed | 100 | А |
| P _D | Total Dissipation | 144 | W |
| Tj | Operating Junction Temperature | -55~175 | $^{\circ}\!\mathbb{C}$ |
| T _{stg} | Storage Temperature | -55~175 | $^{\circ}$ |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT | |
|-----------|---------------------------------------|------|------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 1.05 | °C/W | |
| Rth(ch-a) | Channel-to-ambient thermal resistance | 50 | °C/W | |



| | mm | |
|-----|------|------|
| DIM | MIN | MAX |
| Α | 6.40 | 6.48 |
| В | 5.10 | 5.50 |
| C | 5.80 | 6.20 |
| D | 9.20 | 9.60 |
| E | 2.20 | 2.40 |
| F | 0.50 | 0.70 |
| G | 2.09 | 2.49 |
| Н | 2.09 | 2.49 |
| J | 0.40 | 0.60 |
| K | 0.70 | 0.90 |
| L | 1.60 | 2.00 |
| N | 0.40 | 0.60 |

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|---------------------|--------------------------------|---|-----|-----|-----------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 0.25mA | 200 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =0.1mA | 3.0 | | 5.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =15A | | 64 | 78 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±20V;V _{DS} = 0V | | | ±0.1 | μА |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 200V; V _{GS} = 0V;Tj=25℃ V _{DS} = 200V; V _{GS} = 0V;Tj=125℃ | | | 20 250 | μА |
| V _{SDF} | Diode forward voltage | I _{SD} =15A, V _{GS} =0V | | | 1.3 | V |



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