

Isc N-Channel MOSFET Transistor

IRFI4228

FEATURES

- With TO-220F package
- · Low input capacitance and gate charge
- · Low gate input resistance
- Reduced switching and conduction losses
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

· Switching applications

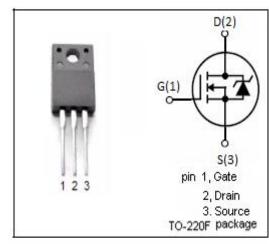


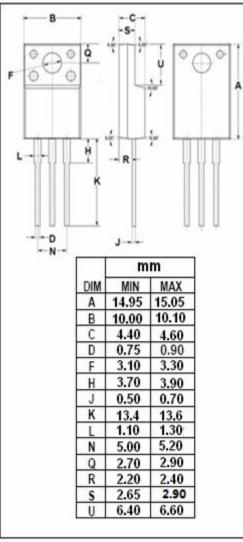
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|--|----------|---------------|--|
| V _{DSS} | Drain-Source Voltage | 150 | V | |
| V _{GSS} | Gate-Source Voltage | ±30 | V | |
| I _D | Drain Current-Continuous @Tc=25°C (V _{GS} at 10V) Tc=100°C | 34 21 | А | |
| I _{DM} | Drain Current-Single Pulsed | 130 | А | |
| P _D | Total Dissipation @Tc=25℃ | 46 | W | |
| Tj | Max. Operating Junction Temperature | 150 | ${\mathbb C}$ | |
| T _{stg} | Storage Temperature | -40~150 | ${\mathbb C}$ | |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT | |
|-----------|---|------|------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 2.73 | °C/W | |
| Rth(ch-a) | Rth(ch-a) Channel-to-ambient thermal resistance | | °C/W | |







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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------|--------------------------------|--|-----|------|------------|------------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D =0.25mA | 150 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D =0.25mA | 3.0 | | 5.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =20A | | 12.2 | 16 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±20V;V _{DS} = 0V | | | ±0.1 | μ А |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 150V; V _{GS} = 0V;Tj=25℃ V _{DS} = 150V; V _{GS} = 0V; Tj=125℃ | | | 20 1000 | μ А |
| V _{SDF} | Diode forward voltage | I_{SD} =20A, V_{GS} = 0 V | | | 1.3 | V |

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