

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

IXFP34N65X2

• FEATURES

- · With low gate drive requirements
- · Easy to drive
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

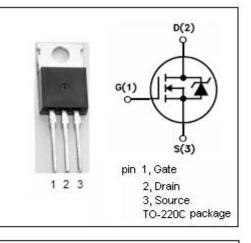
| • ABSOLUTE MAXIMUM RATINGS(Ta=25 C) | | | | | | | |
|-------------------------------------|--------------------------------|---------|------|--|--|--|--|
| SYMBOL | PARAMETER | VALUE | UNIT | | | | |
| V _{DSS} | Drain-Source Voltage | 650 | V | | | | |
| V _{GSS} | Gate-Source Voltage ±30 | | V | | | | |
| ID | Drain Current-Continuous 34 | | A | | | | |
| I _{DM} | Drain Current-Single Pulsed | 68 | A | | | | |
| PD | Total Dissipation | 540 | W | | | | |
| Tj | Operating Junction Temperature | -55~150 | °C | | | | |
| T _{stg} | Storage Temperature | -55~150 | °C | | | | |

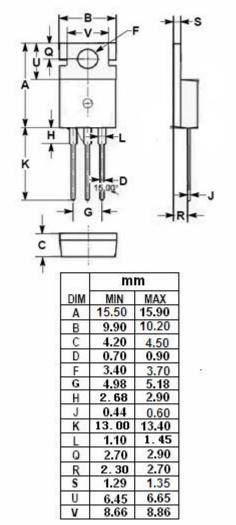
• ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | МАХ | UNIT |
|-----------|------------------------------------|------|------|
| Rth(ch-c) | Channel-to-case thermal resistance | 0.23 | °C/W |

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ELECTRICAL CHARACTERISTICS

$T_{C}\text{=}25^{\circ}\!\!\!\mathrm{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|----------------------|--------------------------------|---|-----|-----|------------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 1mA | 650 | | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} =±30V; I _D =0.25mA | 3.5 | | 5.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =17A | | | 100 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V_{GS} = ±30V; V_{DS} = 0V | | | ±0.1 | μA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 650V; V _{GS} = 0V;@Tc=25℃ Tc=125℃ | | | 10 1750 | μA |
| V _{SDF} | Diode forward voltage | I _{SD} =34A, V _{GS} = 0 V | | | 1.4 | V |

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