

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

AOD482

• FEATURES

- With TO-252(DPAK) packaging
- High speed switching
- · Very high commutation ruggedness
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

APPLICATIONS

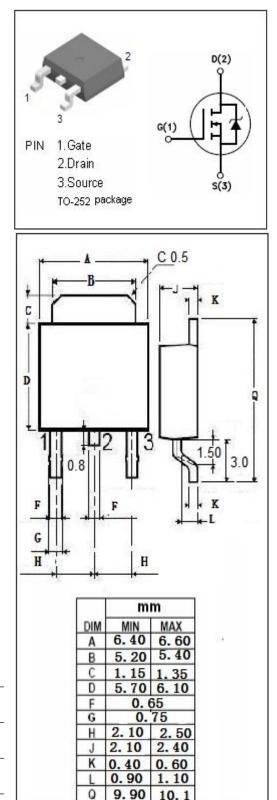
- PFC stages
- LED backlighting
- Power supply
- Switching applications

SYMBOL PARAMETER VALUE UNIT Drain-Source Voltage VDSS 100 V V_{GSS} Gate-Source Voltage ± 20 V Drain Current-Continuous@Tc=25°C 32 I_{D} А 22 Tc=100℃ Drain Current-Single Pulsed 70 **I**DM А P_{D} **Total Dissipation** 100 W Ti **Operating Junction Temperature** -55~175 °C Tstg Storage Temperature -55~175 °C

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT | |
|-----------|---------------------------------------|-----|--------------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 1.5 | °C /W | |
| Rth(ch-a) | Channel-to-ambient thermal resistance | 50 | °C/W | |

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ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|----------------------|--------------------------------|--|-----|-----|--------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 0.25mA | 100 | | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} =±20V; I _D =0.25mA | 1.6 | | 2.7 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =10A | | 30 | 37 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±20V;V _{DS} =0V | | | ±0.1 | μA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 100V; V _{GS} = 0V;Tc=25℃ V _{DS} = 100V; V _{GS} = 0V;Tc=55℃ | | | 1 5 | μA |
| V _{SDF} | Diode forward voltage | I_{SD} =1A, V_{GS} = 0 V | | | 1.0 | V |



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