

Isc N-Channel MOSFET Transistor

AOD2922

• FEATURES

- With To-252(DPAK) package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

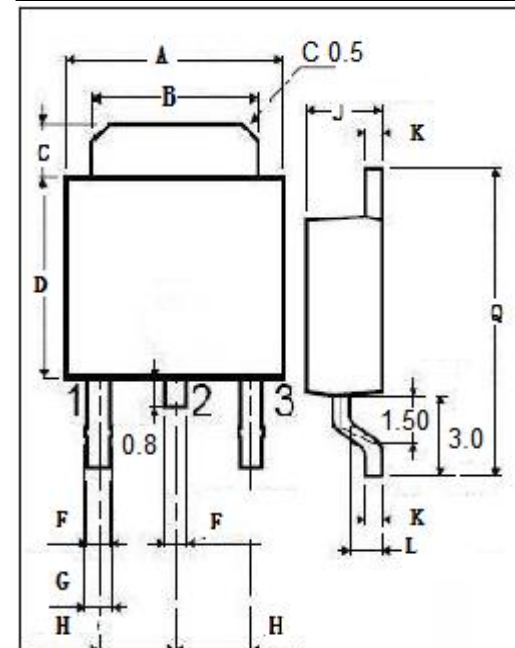
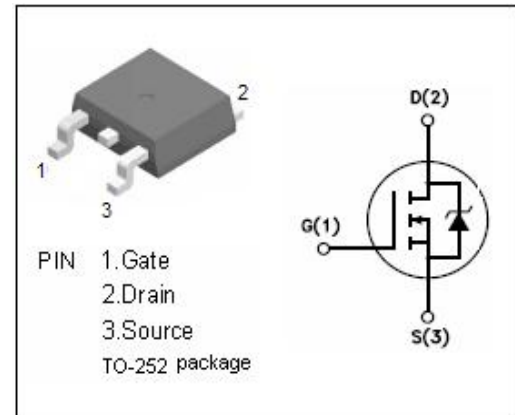
- Switching applications

• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{DSS} | Drain-Source Voltage | 100 | V |
| V _{GSS} | Gate-Source Voltage | ±20 | V |
| I _D | Drain Current-Continuous@T _c =25°C T _c =100°C | 7 5 | A |
| I _{DM} | Drain Current-Single Pulsed | 10 | A |
| P _D | Total Dissipation @T _c =25°C | 17 | W |
| T _{ch} | Max. Operating Junction Temperature | 175 | °C |
| T _{stg} | Storage Temperature | -55~175 | °C |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|-----------------------|---------------------------------------|-----|------|
| R _{th(ch-c)} | Channel-to-case thermal resistance | 8.8 | °C/W |
| R _{th(ch-a)} | Channel-to-ambient thermal resistance | 50 | °C/W |



| DIM | mm | |
|-----|------|------|
| | MIN | MAX |
| A | 6.40 | 6.60 |
| B | 5.20 | 5.40 |
| C | 1.15 | 1.35 |
| D | 5.70 | 6.10 |
| F | 0.65 | |
| G | 0.75 | |
| H | 2.10 | 2.50 |
| J | 2.10 | 2.40 |
| K | 0.40 | 0.60 |
| L | 0.90 | 1.10 |
| Q | 9.90 | 10.1 |

Isc N-Channel MOSFET Transistor**AOD2922****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------|--------------------------------|-----------------------------|-----|-----|-----------|-----------|
| BV_{DSS} | Drain-Source Breakdown Voltage | $V_{GS}=0V; I_D=0.25mA$ | 100 | | | V |
| $V_{GS(th)}$ | Gate Threshold Voltage | $V_{DS}=V_{GS}; I_D=0.25mA$ | 1.7 | | 2.7 | V |
| $R_{DS(on)}$ | Drain-Source On-Resistance | $V_{GS}=10V; I_D=5A$ | | 117 | 140 | $m\Omega$ |
| I_{GSS} | Gate-Source Leakage Current | $V_{GS}=\pm 20V; V_{DS}=0V$ | | | ± 0.1 | μA |
| I_{DSS} | Drain-Source Leakage Current | $V_{DS}=100V; V_{GS}=0V$ | | | 1 | μA |
| V_{SDF} | Diode forward voltage | $I_{SD}=1A, V_{GS}=0V$ | | | 1.1 | V |

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