

isc N-Channel MOSFET Transistor

AOD468

FEATURES

- Drain Current –I_D= 11.5A@ T_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}= 300V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} = 0.42 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

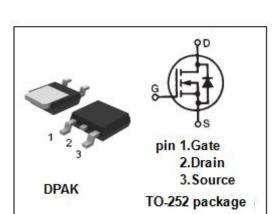
• Designed for use in switch mode power supplies and general purpose applications.

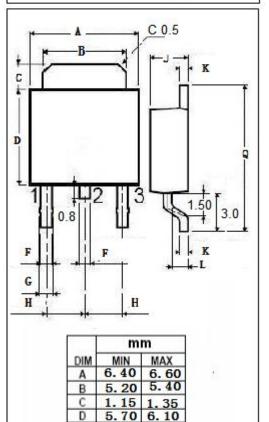
| ABSOLUTE WANIWOW RATINGS (Ta-25 C) | | | | | | |
|------------------------------------|--|---------|------|--|--|--|
| SYMBOL | PARAMETER VALUE | | UNIT | | | |
| V _{DSS} | Drain-Source Voltage | 300 | V | | | |
| V _{GS} | Gate-Source Voltage-Continuous ±30 | | V | | | |
| I _D | Drain Current-Continuous 11.5 | | А | | | |
| I _{DM} | Drain Current-Single Pluse | 29 | A | | | |
| P _D | Total Dissipation @T _c =25℃ | 150 | W | | | |
| TJ | Max. Operating Junction Temperature | -50~175 | °C | | | |
| T _{stg} | Storage Temperature | -50~175 | °C | | | |

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 1.0 | °C/W |





0.65

50

2.40

10

10

0.40

9.90

¹ isc & iscsemi is registered trademark

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isc website: <u>www.iscsemi.com</u>



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | МАХ | UNIT |
|---------------------|---------------------------------|---|-----|---------|------|
| V(BR)DSS | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 0.25mA | 300 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = 5V; I _D = 0.25mA | 3.4 | 4.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =6A | | 0.42 | Ω |
| lgss | Gate-Body Leakage Current | V _{GS} = ±30V;V _{DS} = 0 | | ±100 | nA |
| loss | Zero Gate Voltage Drain Current | V _{DS} = 300V; V _{GS} = 0 V _{DS} = 240V; V _{GS} = 0@T _J =125℃ | | 1 10 | μA |
| V _{SD} | Forward On-Voltage | I _S = 1A; V _{GS} = 0 | | 1 | V |



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