

isc N-Channel MOSFET Transistor

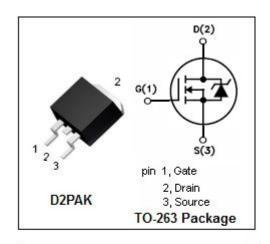
AOB298L

DESCRIPTION

- Drain Current I_D= 58A@ T_C=25°C
- · Drain Source Voltage
 - : V_{DSS}= 100V(Min)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Be ideal for boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

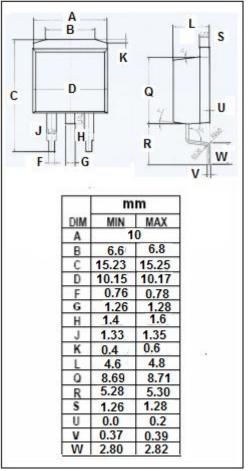


ABSOLUTE MAXIMUM RATINGS(Tc=25°C)

| SYMBOL | ARAMETER | VALUE | UNIT |
|----------------------|---|---------|--|
| V_{DSS} | Drain-Source Voltage (V _{GS} =0) | 100 | ٧ |
| V_{GS} | Gate-Source Voltage | ±20 | V |
| I _D | Drain Current-continuous@ Tc=25℃ | 58 | Α |
| I _{D(puls)} | Pulse Drain Current | 130 | Α |
| P _{tot} | Total Dissipation@T _C =25°C | 100 | W |
| Tj | Operating Junction Temperature | -55~175 | $^{\circ}$ C |
| T _{stg} | Storage Temperature Range | -55~175 | $^{\circ}\!$ |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|----------------------|--------------------------------------|-----|------|
| R _{th(j-c)} | Thermal Resistance, Junction to Case | 1.5 | °C/W |





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• ELECTRICAL CHARACTERISTICS (Tc=25°C)

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------------|---------------------------------|---|-----|------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 250μA | 100 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D =250μA | 2.7 | 4.1 | V |
| V _{SD} | Diode Forward On-Voltage | I _S =1A; V _{GS} = 0 | | 1.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =20A | | 14.5 | mΩ |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±20V;V _{DS} = 0 | | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} = 100V; V _{GS} = 0 | | 1 | μA |



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