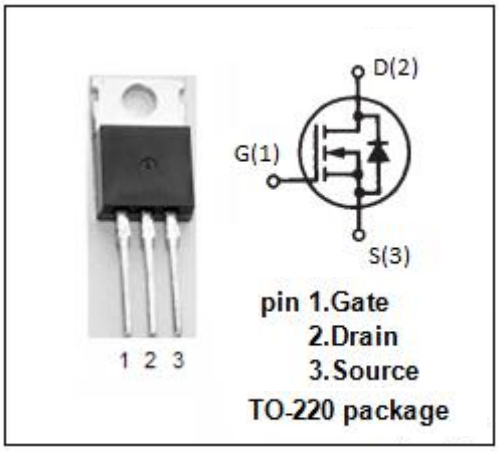
# isc N-Channel MOSFET Transistor AOT262L




- **FEATURES**
- Drain Current –$I_D$= 140A@ $T_C$=25℃
- Drain Source Voltage-
  : $V_{DSS}$= 60V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 3mΩ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

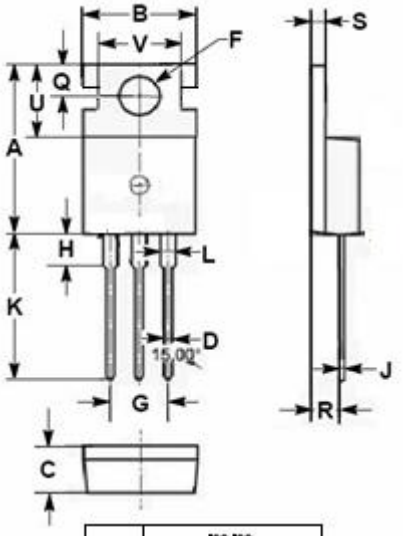
- **DESCRIPTION**
- Be suitable for synchronous rectification for server and general purpose applications

- **ABSOLUTE MAXIMUM RATINGS($T_a$=25℃)**

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{DSS}$ | Drain-Source Voltage | 60 | V |
| $V_{GS}$ | Gate-Source Voltage | ±20 | V |
| $I_D$ | Drain Current-Continuous | 140 | A |
| $I_{DM}$ | Drain Current-Single Pulsed | 500 | A |
| $P_D$ | Total Dissipation @$T_C$=25℃ | 333 | W |
| $T_j$ | Max. Operating Junction Temperature | -55~175 | ℃ |
| $T_{stg}$ | Storage Temperature | -55~175 | ℃ |

- **THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---|---|---|---|
| Rth(ch-c) | Channel-to-case thermal resistance | 0.45 | ℃/W |




| DIM | mm MIN | MAX |
|---|---|---|
| A | 15.50 | 15.90 |
| B | 9.80 | 10.20 |
| C | 4.20 | 4.50 |
| D | 0.70 | 0.90 |
| F | 3.40 | 3.70 |
| G | 4.98 | 5.18 |
| H | 2.68 | 2.90 |
| J | 0.44 | 0.60 |
| K | 12.80 | 13.40 |
| L | 1.20 | 1.45 |
| Q | 2.70 | 2.90 |
| R | 2.30 | 2.70 |
| S | 1.29 | 1.35 |
| U | 6.45 | 6.65 |
| V | 8.66 | 8.86 |

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## ELECTRICAL CHARACTERISTICS

**$T_C$=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---|---|---|---|---|---|
| $BV_{DSS}$ | Drain-Source Breakdown Voltage | $V_{GS}$=0V; $I_D$ = 250 μ A | 60 | | V |
| $V_{GS(th)}$ | Gate Threshold Voltage | $V_{DS}$= $V_{GS}$; $I_D$ = 250 μ A | 2.2 | 3.2 | V |
| $R_{DS(on)}$ | Drain-Source On-Resistance | $V_{GS}$= 10V; $I_D$= 20A | | 3 | mΩ |
| $I_{GSS}$ | Gate-Source Leakage Current | $V_{GS}$= ±20V;$V_{DS}$= 0V | | ±100 | nA |
| $I_{DSS}$ | Drain-Source Leakage Current | $V_{DS}$= 60V; $V_{GS}$= 0V<br>$V_{DS}$= 60V; $V_{GS}$= 0V； $T_J$= 55℃ | | 1<br>5 | μ A |
| $V_{SD}$ | Diode forward voltage | Is= 1A; $V_{GS}$ = 0V | | 1 | V |