

isc N-Channel MOSFET Transistor

AOTF266L

• FEATURES

- Drain Current $-I_D = 140A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 60V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 3.5m\Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

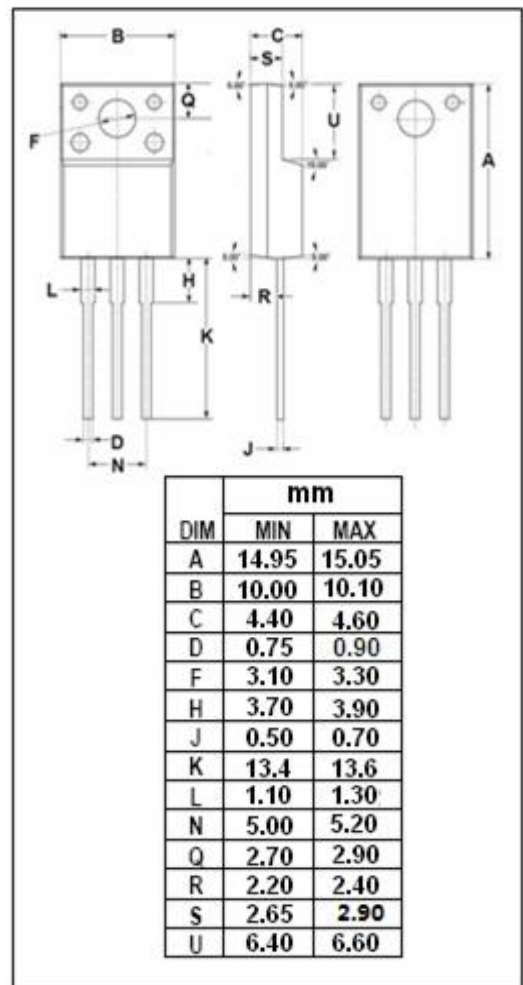
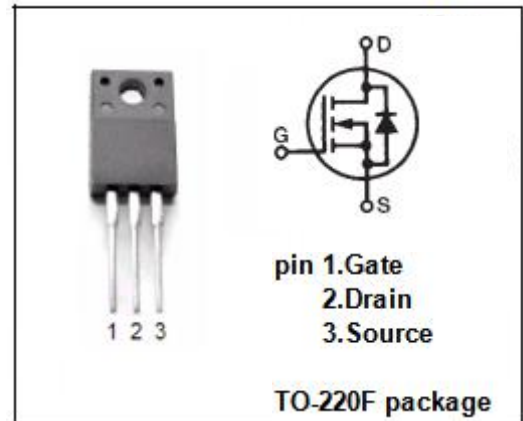
- Be suitable for synchronous rectification for server and general purpose applications

• ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

| 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 | 450 | A |
| P_D | Total Dissipation @ $T_C = 25^\circ C$ | 45.5 | W |
| T_j | Max. Operating Junction Temperature | -55~175 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~175 | $^\circ C$ |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|----------------|------------------------------------|-----|--------------|
| $R_{th(ch-c)}$ | Channel-to-case thermal resistance | 3.3 | $^\circ C/W$ |



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------------|--------------------------------|--|-----|------------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 250 μA | 60 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 250 μA | 2.2 | 3.2 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 20A V _{GS} = 10V; I _D = 20A; T _J = 125°C | | 3.5 5.9 | 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 V _{DS} = 60V; V _{GS} = 0V; T _J = 55°C | | 1 5 | μA |
| V _{SD} | Diode forward voltage | I _S = 1A; V _{GS} = 0V | | 1 | V |

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