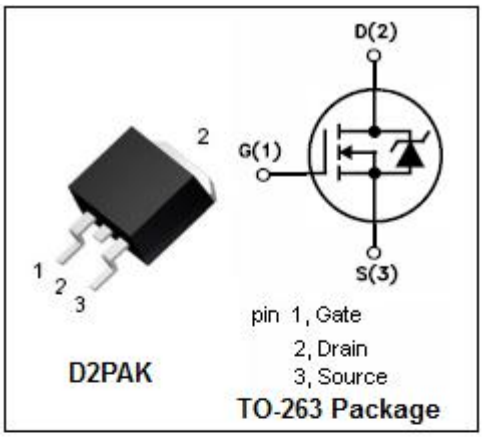
# isc N-Channel MOSFET Transistor IRFS7534TRLPBF

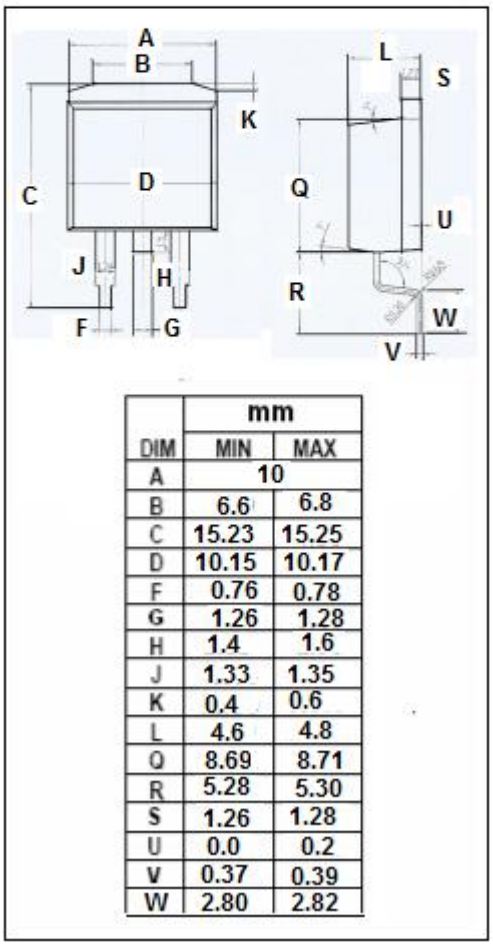



## DESCRIPTION

- Drain Current –$I_D$=232 A@ $T_C$=25℃
- Drain Source Voltage-
  : $V_{DSS}$= 60V(Min)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Improved Gate, Avalanche and Dynamic dV/dt Ruggedness
- Fully Characterized Capacitance and Avalanche SOA
- Enhanced body diode dV/dt and dI/dt Capability
- Lead-Free, RoHS Compliant




| DIM | mm MIN | MAX |
|---|---|---|
| A | 10 | |
| B | 6.6 | 6.8 |
| C | 15.23 | 15.25 |
| D | 10.15 | 10.17 |
| F | 0.76 | 0.78 |
| G | 1.26 | 1.28 |
| H | 1.4 | 1.6 |
| J | 1.33 | 1.35 |
| K | 0.4 | 0.6 |
| L | 4.6 | 4.8 |
| Q | 8.69 | 8.71 |
| R | 5.28 | 5.30 |
| S | 1.26 | 1.28 |
| U | 0.0 | 0.2 |
| V | 0.37 | 0.39 |
| W | 2.80 | 2.82 |

## ABSOLUTE MAXIMUM RATINGS($T_a$=25℃)

| SYMBOL | ARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{DSS}$ | Drain-Source Voltage ($V_{GS}$=0) | 60 | V |
| $V_{GS}$ | Gate-Source Voltage | ±20 | V |
| $I_D$ | Drain Current-continuous@ TC=25℃ | 232 | A |
| $P_{tot}$ | Total Dissipation@TC=25℃ | 294 | W |
| $T_j$ | Max. Operating Junction Temperature | -55~175 | ℃ |
| $T_{stg}$ | Storage Temperature Range | -55~175 | ℃ |

## THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---|---|---|---|
| $R_{th\ j\text{-}c}$ | Thermal Resistance,Junction to Case | 0.51 | ℃/W |

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## • ELECTRICAL CHARACTERISTICS ($T_C$=25℃)

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)DSS}$ | Drain-Source Breakdown Voltage | $V_{GS}$= 0; $I_D$= 0.25mA | 60 | | | V |
| $V_{GS(th)}$ | Gate Threshold Voltage | $V_{DS}$= $V_{GS}$; $I_D$=0.25mA | 2.1 | | 3.7 | V |
| $R_{DS(on)}$ | Drain-Source On-stage Resistance | $V_{GS}$=10V; $I_D$= 100A | | 2.0 | 2.4 | mΩ |
| $I_{GSS}$ | Gate Source Leakage Current | $V_{GS}$= ±20V;$V_{DS}$= 0 | | | ±100 | nA |
| $I_{DSS}$ | Zero Gate Voltage Drain Current | $V_{DS}$=60V; $V_{GS}$= 0 | | | 1 | uA |
| $V_{SD}$ | Forward On-Voltage | $I_S$= 100A; $V_{GS}$=0 | | | 1.2 | V |