

isc N-Channel MOSFET Transistor

IRFS244A

FEATURES

- Avalanche Rugged Technology
- Rugged Gate Oxide Technology
- Lower Input Capacitance
- Improved Gate Charge
- Extended Safe Operating Area

DESCRIPTION

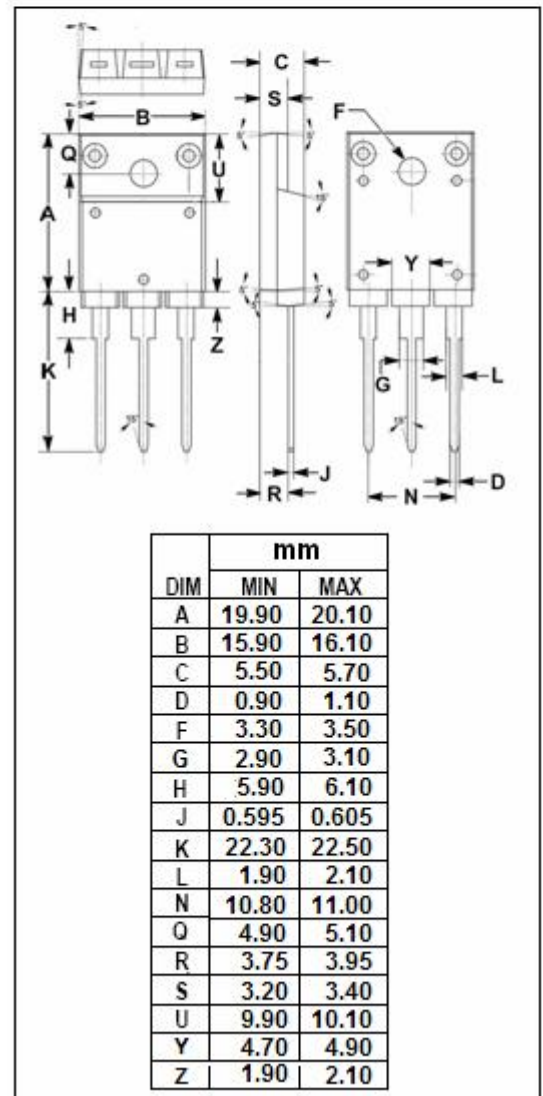
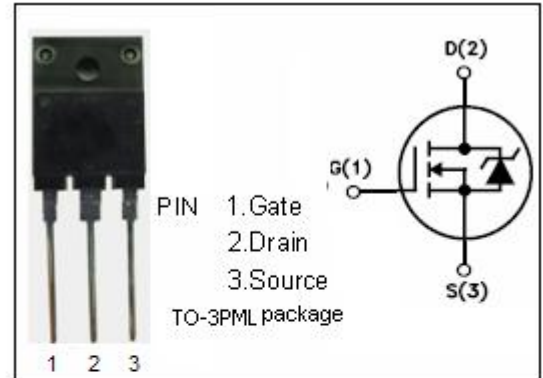
- Designed for use in switch mode power supplies and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|---|---------|------|
| V _{DSS} | Drain-Source Voltage | 250 | V |
| V _{GS} | Gate-Source Voltage-Continuous | ±30 | V |
| I _D | Drain Current-Continuous | 10.2 | A |
| I _{DM} | Drain Current-Single Pulse | 40.8 | A |
| P _D | Total Dissipation @T _C =25°C | 73 | W |
| T _J | Max. Operating Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature | -55~150 | °C |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|---|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 1.7 | °C/W |
| R _{th j-a} | Thermal Resistance, Junction to Ambient | 40 | °C/W |



isc N-Channel MOSFET Transistor**IRFS244A****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------|---------------------------------|---|-----|-----------|---------------|
| $V_{(BR)DSS}$ | Drain-Source Breakdown Voltage | $V_{GS}=0; I_D=0.25\text{mA}$ | 250 | | V |
| $V_{GS(th)}$ | Gate Threshold Voltage | $V_{DS}=V_{GS}; I_D=0.25\text{mA}$ | 2 | 4 | V |
| $R_{DS(on)}$ | Drain-Source On-Resistance | $V_{GS}=10\text{V}; I_D=5.1\text{A}$ | | 0.28 | Ω |
| I_{GSS} | Gate-Body Leakage Current | $V_{GS}=\pm 30\text{V}; V_{DS}=0$ | | ± 100 | nA |
| I_{DSS} | Zero Gate Voltage Drain Current | $V_{DS}=250\text{V}; V_{GS}=0$ $V_{DS}=200\text{V}; V_{GS}=0; T_j=125^\circ\text{C}$ | | 10 100 | μA |
| V_{SD} | Forward On-Voltage | $I_S=10.2\text{A}; V_{GS}=0$ | | 1.5 | V |