

isc N-Channel Mosfet Transistor

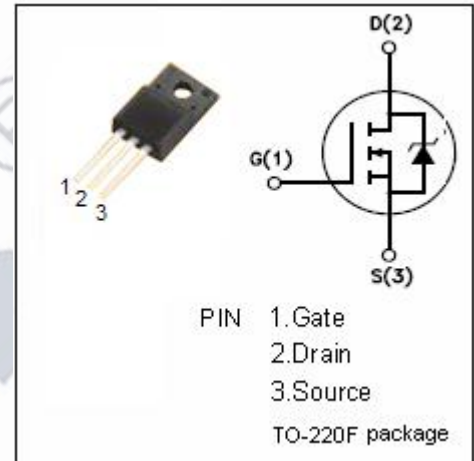
HG7N60

• FEATURES

- Drain Current $-I_D = 7A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 1.2 \Omega (\text{Max})$
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirements

• DESCRIPTION

- High efficiency switch mode power supply.
Charger
UPS power supply.



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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--|----------|------------|
| V_{DSS} | Drain-Source Voltage | 600 | V |
| V_{GS} | Gate-Source Voltage-Continuous | ± 30 | V |
| I_D | Drain Current-Continuous | 7 | A |
| I_{DM} | Drain Current-Single Plused | 28 | A |
| P_D | Total Dissipation @ $T_C = 25^\circ C$ | 125 | W |
| T_j | Max. Operating Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ C$ |

isc N-Channel Mosfet Transistor**HG7N60****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------|---------------------------------|--------------------------------------|-----|-----------|---------------|
| $V_{(BR)DSS}$ | Drain-Source Breakdown Voltage | $V_{GS}=0; I_D=0.25\text{mA}$ | 600 | | 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 | $V_{GS}=10\text{V}; I_D=3.5\text{A}$ | | 1.2 | 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 | $V_{DS}=600\text{V}; V_{GS}=0$ | | 5 | μA |
| V_{SD} | Forward On-Voltage | $I_S=2\text{A}; V_{GS}=0$ | | 1.5 | V |