

isc N-Channel MOSFET Transistor
FQP8N80C
FEATURES

- Drain Current - $I_D=8A@T_C=25^{\circ}C$
- Drain Source Voltage - $V_{DSS}=800V(\text{Min})$
- Static Drain-Source On-Resistance
- $R_{DS(on)}=1.55\Omega(\text{Max})@V_{GS}=10V$

DESCRIPTION

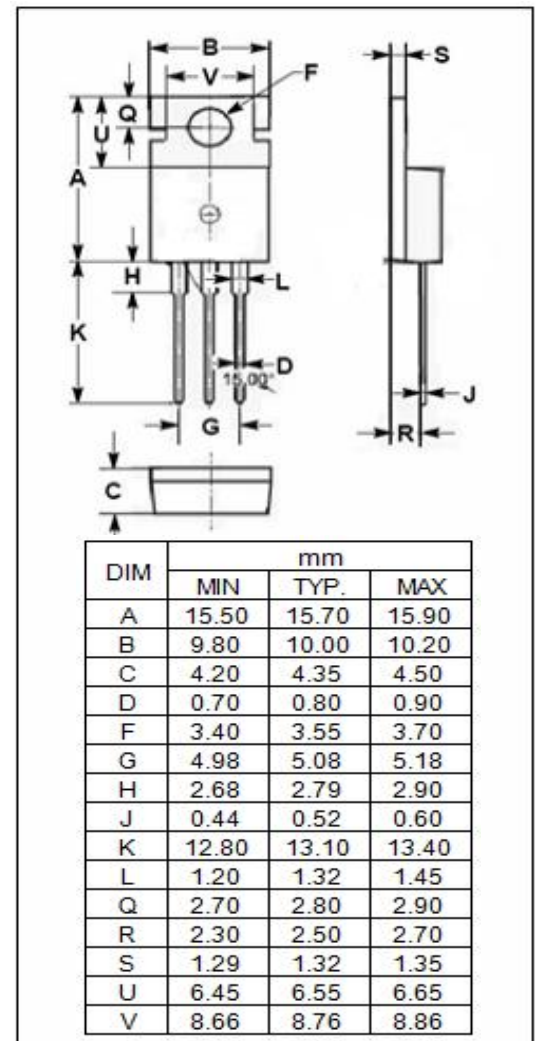
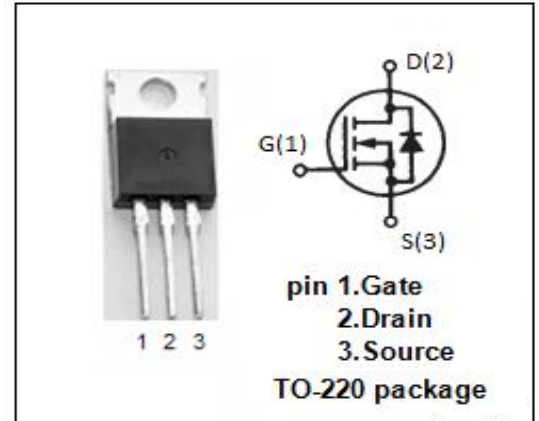
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---------------------------------------|----------|-------------|
| V_{DSS} | Drain-Source Voltage | 800 | V |
| V_{GS} | Gate-Source Voltage-Continuous | ± 30 | V |
| I_D | Drain Current-Continuous | 8 | A |
| I_{DM} | Drain Current-Single Pluse | 32 | A |
| P_D | Total Dissipation @ $T_C=25^{\circ}C$ | 178 | W |
| T_J | Max. Operating Junction Temperature | 150 | $^{\circ}C$ |
| T_{stg} | Storage Temperature | -55~150 | $^{\circ}C$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 0.89 | $^{\circ}C/W$ |



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ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------------|---------------------------------|---|-----|------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 0.25mA | 800 | -- | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 0.25mA | 3.0 | 5.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =4A | -- | 1.55 | Ω |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±30V; V _{DS} = 0 | -- | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} =800V; V _{GS} = 0 | -- | 10 | uA |
| V _{SD} | Forward On-Voltage | I _S =8A; V _{GS} = 0 | -- | 1.4 | V |

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