

isc N-Channel MOSFET Transistor

NDF04N62Z

FEATURES

- Drain Current $-I_D = 4.4A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = 620V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)} = 2.0\Omega(\text{Max}) @ V_{GS} = 10V$

DESCRIPTION

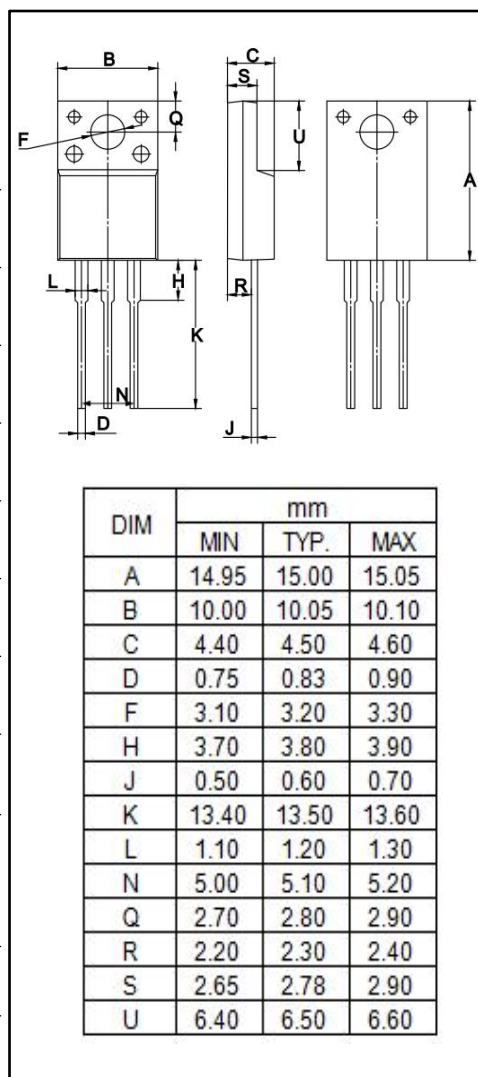
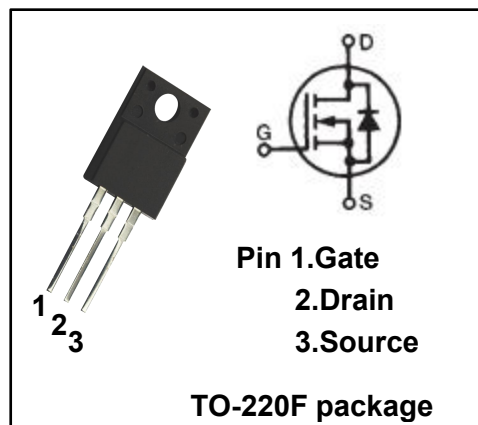
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--|----------|------------|
| V_{DSS} | Drain-Source Voltage | 620 | V |
| V_{GS} | Gate-Source Voltage-Continuous | ± 30 | V |
| I_D | Drain Current-Continuous | 4.4 | A |
| I_{DM} | Drain Current-Single Pluse | 18 | A |
| P_D | Total Dissipation @ $T_C = 25^\circ C$ | 28 | 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 | 4.46 | $^\circ C/W$ |



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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 = 1mA | 620 | -- | V |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} = 620V; V _{GS} = 0 | -- | 1 | uA |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±20V; V _{DS} = 0 | -- | ±10 | uA |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 0.05mA | 3.0 | 4.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 2.0A | -- | 2.0 | Ω |
| V _{SD} | Forward On-Voltage | I _S = 4.0A; V _{GS} = 0 | -- | 1.6 | V |

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