

## isc N-Channel MOSFET Transistor

FDD2670

## FEATURES

- Drain Current  $-I_D=4.9A@T_C=25^{\circ}C$
- Drain Source Voltage  $-V_{DSS}=200V(\text{Min})$
- Static Drain-Source On-Resistance  
 $-R_{DS(on)}=720m\Omega(\text{Max})$

## DESCRIPTION

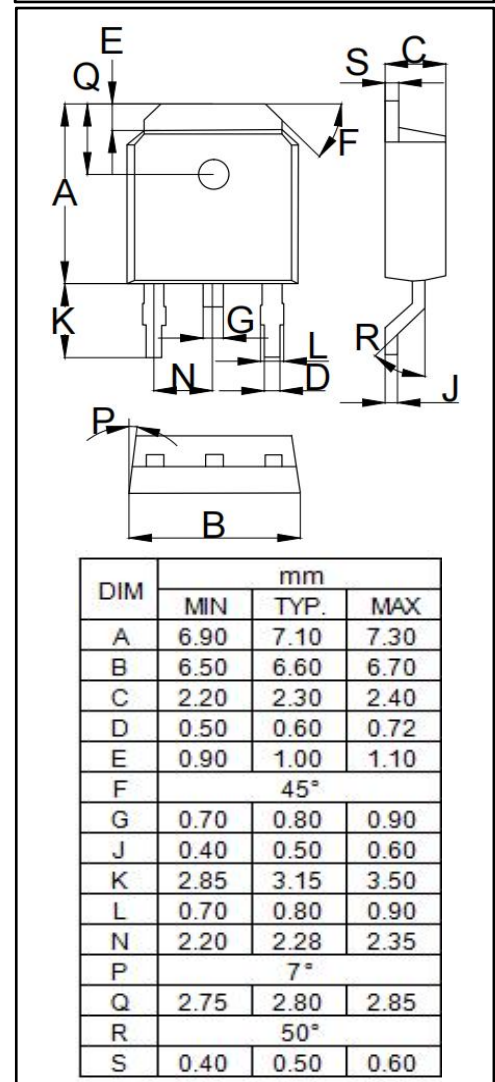
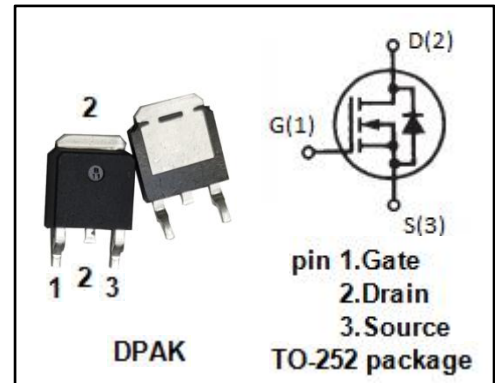
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

| SYMBOL    | PARAMETER                             | VALUE    | UNIT        |
|-----------|---------------------------------------|----------|-------------|
| $V_{DSS}$ | Drain-Source Voltage                  | 200      | V           |
| $V_{GS}$  | Gate-Source Voltage-Continuous        | $\pm 20$ | V           |
| $I_D$     | Drain Current-Continuous              | 3.6      | A           |
| $I_{DM}$  | Drain Current-Single Pluse            | 20       | A           |
| $P_D$     | Total Dissipation @ $T_C=25^{\circ}C$ | 70       | 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 | 1.8 | $^{\circ}C/W$ |



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ELECTRICAL CHARACTERISTICS ( $T_c=25^{\circ}\text{C}$  unless otherwise specified)

| SYMBOL        | PARAMETER                       | CONDITIONS                              | MIN | TYP. | MAX       | UNIT             |
|---------------|---------------------------------|-----------------------------------------|-----|------|-----------|------------------|
| $V_{(BR)DSS}$ | Drain-Source Breakdown Voltage  | $V_{GS}=0$ ; $I_D=0.25\text{mA}$        | 200 | --   | --        | V                |
| $V_{GS(th)}$  | Gate Threshold Voltage          | $V_{DS}=V_{GS}$ ; $I_D=0.25\text{mA}$   | 2.0 | --   | 4.5       | V                |
| $R_{DS(on)}$  | Drain-Source On-Resistance      | $V_{GS}=10\text{V}$ ; $I_D=3.6\text{A}$ | --  | --   | 130       | $\text{m}\Omega$ |
| $I_{GSS}$     | Gate-Body Leakage Current       | $V_{GS}=\pm 20\text{V}$ ; $V_{DS}=0$    | --  | --   | $\pm 100$ | nA               |
| $I_{DSS}$     | Zero Gate Voltage Drain Current | $V_{DS}=160\text{V}$ ; $V_{GS}=0$       | --  | --   | 1         | $\mu\text{A}$    |
| $V_{SD}$      | Forward On-Voltage              | $I_S=2.1\text{A}$ ; $V_{GS}=0$          | --  | --   | 1.2       | V                |

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