

isc N-Channel MOSFET Transistor

2SK1700

DESCRIPTION

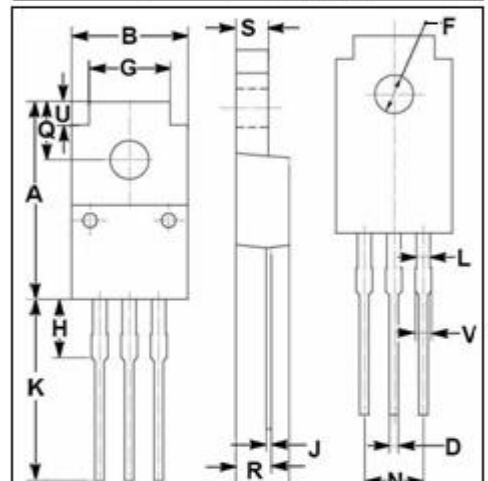
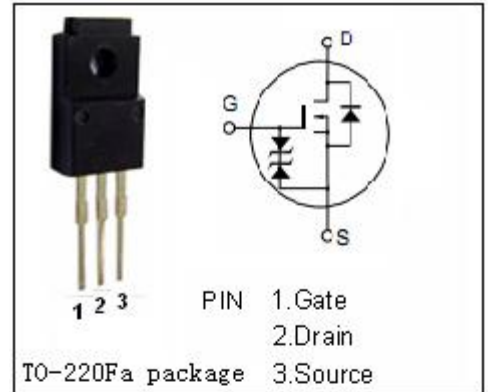
- Drain Current $-I_D = 5A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 450V(\text{Min})$

APPLICATIONS

- High speed power switching.
- Low drive current.
- Suitable for motor control, switching regulator and DC – DC converter.

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

| SYMBOL | ARAMETER | VALUE | UNIT |
|-----------|--|----------|------------|
| V_{DSS} | Drain-Source Voltage ($V_{GS} = 0$) | 450 | V |
| V_{GS} | Gate-Source Voltage | ± 30 | V |
| I_D | Drain Current-continuous@ $T_C = 25^\circ C$ | 5 | A |
| P_{tot} | Total Dissipation@ $T_C = 25^\circ C$ | 35 | W |
| T_j | Max. Operating Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ C$ |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 16.85 | 17.15 |
| B | 9.90 | 10.10 |
| C | 4.35 | 4.65 |
| D | 0.75 | 0.80 |
| F | 3.20 | 3.40 |
| G | 6.90 | 7.10 |
| H | 5.15 | 5.45 |
| J | 0.45 | 0.75 |
| K | 13.35 | 13.65 |
| L | 1.10 | 1.30 |
| N | 4.98 | 5.18 |
| Q | 4.85 | 5.15 |
| R | 2.95 | 3.25 |
| S | 2.70 | 2.90 |
| U | 1.75 | 2.05 |
| V | 1.30 | 1.50 |

isc N-Channel Mosfet Transistor**2SK1700****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|----------------------|----------------------------------|---|-----|-----|-----|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} =0; I _D = 10mA | 450 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =10 V _{GS} ; I _D =1mA | 2.0 | | 4.0 | V |
| R _{DS(on)} | Drain-Source On-stage Resistance | V _{GS} =10V; I _D = 3A | | | 1.8 | Ω |
| I _{GSS} | Gate Source Leakage Current | V _{GS} = ±25V; V _{DS} = 0 | | | ±10 | uA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} =450V; V _{GS} = 0 | | | 250 | uA |