

isc N-Channel MOSFET Transistor

2SK1409

D(2)

DESCRIPTION

- Drain Current –I_D=20A@ T_C=25℃
- · Drain Source Voltage-
- : V_{DSS}=450 (Min)
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS,AC and DC motor controls, relay and solenoid drivers.

3.Source TO-3PN package 2 3 1 B C S υQ È Ó H K G -R mm MIN MAX DIM 19.60 А 20.10 В 15.50 15.70 4.70 C 4.90 D 0.90 1.10

PIN 1.Gate

2.Drain

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | ARAMETER | VALUE | UNI T |
|------------------|---|---------|----------|
| V _{DSS} | Drain-Source Voltage (V _{GS} =0) | 450 | V |
| V_{GS} | Gate-Source Voltage | ±20 | V |
| ID | Drain Current-continuous@ TC=25°C | 20 | А |
| P _{tot} | Total Dissipation@TC=25°C 250 | | w |
| Tj | Max. Operating Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -55~150 | °C |

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1.90

3.40

2.90

3.20

1.90

10.89

4.90

3.35

5.90

9.90

1.995 2.100

0.595

2.10

3.60

3.20 3.40

0.605 20.00 20.70

2.20

10.91

5.10

3.45



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| ELECTRI | ELECTRICAL CHARACTERISTICS (TC=25 C) | | | | | | | | |
|----------------------|--------------------------------------|--|-----|-----|------|------|--|--|--|
| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | МАХ | UNIT | | | |
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} =0; I _D = 10mA | 450 | | | V | | | |
| $V_{GS(th)}$ | Gate Threshold Voltage | V _{DS} = 0V; I _D =1mA | 2.0 | 3.0 | 4.0 | V | | | |
| R _{DS(on)} | Drain-Source On-stage Resistance | V _{GS} =10V; I _D =10A | | | 0.25 | Ω | | | |
| I _{GSS} | Gate Source Leakage Current | V _{GS} = ±20V;V _{DS} = 0 | | | ±100 | nA | | | |
| IDSS | Zero Gate Voltage Drain Current | V _{DS} =450V; V _{GS} = 0 | | | 500 | uA | | | |

• ELECTRICAL CHARACTERISTICS (Tc=25°C)

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