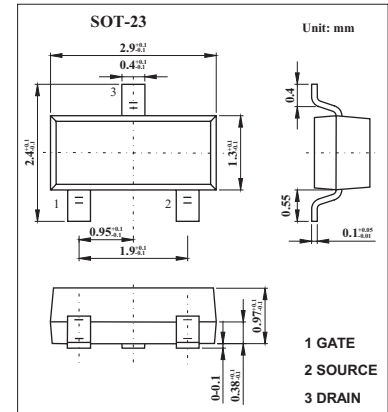


MOS Field Effect Transistor

2SK1828

■ Features

- 2.5V Gate Drive
- Low Threshold Voltage : $V_{th}=0.5$ to $1.5V$
- High Speed



■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|-------------------------|-----------|-------------|------------|
| Drain to source voltage | V_{DSS} | 20 | V |
| Gate to source voltage | V_{GSS} | 10 | V |
| Drain current | I_D | 50 | mA |
| Power dissipation | P_D | 200 | mW |
| Channel temperature | T_{ch} | 150 | $^\circ C$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ C$ |

* $PW \leq 10ms$, duty cycle $\leq 5\%$

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|-------------------------------------|--------------|---|-----|------|-----|----------|
| Drain source breakdown voltage | V_{DSS} | $I_D=100 \mu A, V_{GS}=0$ | 20 | | | V |
| Drain cut-off current | I_{DSS} | $V_{DS}=20V, V_{GS}=0$ | | | 1.0 | μA |
| Gate leakage current | I_{GSS} | $V_{GS}=10V, V_{DS}=0$ | | | 1 | μA |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS}=3.0V, I_D=10mA$ | 20 | | | ms |
| Drain to source on-state resistance | $R_{DS(on)}$ | $V_{GS}=2.5V, I_D=10mA$ | | 25 | 40 | Ω |
| Input capacitance | C_{iss} | $V_{DS}=3.0V, V_{GS}=0, f=1MHz$ | | 5.5 | | pF |
| Output capacitance | C_{oss} | | | 1.6 | | pF |
| Reverse transfer capacitance | C_{rss} | | | 6.5 | | pF |
| Switching time turn on time | t_{on} | $I_D=10mA, V_{GS(on)}=0$ to $2.5V, V_{DD}=3.0V$ | | 0.14 | | μs |
| Switching time turn off time | t_{off} | | | 0.14 | | μs |

■ Marking

| | |
|---------|----|
| Marking | KI |
|---------|----|