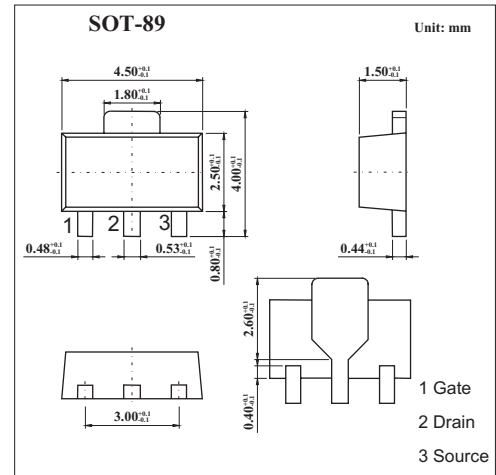
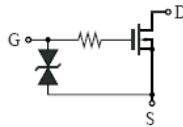


Silicon N-Channel MOSFET

2SK2211

■ Features

- Low ON-resistance $R_{DS(ON)}$
- High-speed switching



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

| Parameter | Symbol | Rating | Unit |
|-------------------------|------------|-------------|------------------|
| Drain to source voltage | V_{DSS} | 30 | V |
| Gate to source voltage | V_{GSS} | ± 20 | V |
| Drain current | I_D | ± 1.0 | A |
| | I_{DP}^* | ± 2.0 | A |
| Power dissipation | P_D | 1 | W |
| Channel temperature | T_{ch} | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

* $PW \leq 10\text{ms}$, Duty Cycle $\leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|-------------------------------------|--------------|---|----------|------|----------|---------------|
| Drain to source breakdown voltage | V_{DSS} | $I_D=0.1\text{mA}, V_{GS}=0$ | 30 | | | V |
| Gate to source voltage | V_{GSS} | $I_{GS}=0.1\text{mA}, V_{GS}=0$ | ± 20 | | | V |
| Drain cut-off current | I_{DSS} | $V_{DS}=25\text{V}, V_{GS}=0$ | | | 1.0 | μA |
| Gate leakage current | I_{GSS} | $V_{GS}=\pm 15\text{V}, V_{DS}=0$ | | | ± 10 | μA |
| Gate threshold voltage | V_{th} | $V_{DS}=5\text{V}, I_D=1\text{mA}$ | 0.8 | | 2 | V |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS}=10\text{V}, I_D=0.5\text{A}$ | 0.5 | | | S |
| | | $V_{GS}=4\text{V}, I_D=0.5\text{A}$ | | 0.48 | 0.75 | Ω |
| Drain to source on-state resistance | $R_{DS(on)}$ | $V_{GS}=10\text{V}, I_D=0.5\text{A}$ | | 0.35 | 0.6 | Ω |
| | | | | 87 | | pF |
| Input capacitance | C_{iss} | $V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$ | | 69 | | pF |
| Output capacitance | C_{oss} | | | 23 | | pF |
| Reverse transfer capacitance | C_{rss} | | | 12 | | ns |
| Turn-on delay time | t_{on} | $I_D=0.5\text{A}, V_{GS(on)}=10\text{V}, R_L=10\Omega, V_{DD}=10\text{V}$ | | 160 | | ns |
| Rise time | t_r | | | 60 | | ns |
| Turn-off delay time | t_{off} | | | | | |

■ Marking

| | |
|---------|----|
| Marking | 2M |
|---------|----|