

2SK1266

加急出货

Silicon N-channel Power F-MOS FET

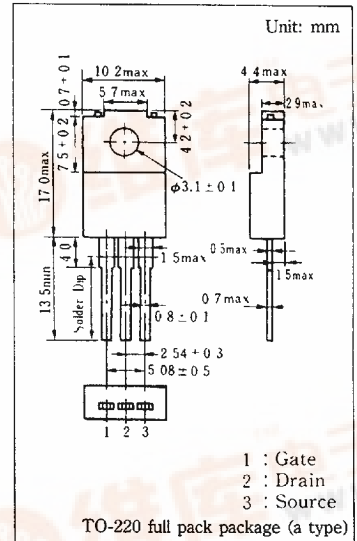
■ Features

- Low ON resistance $R_{DS(on)}$: $R_{DS(on)1} = 0.08\Omega$ (typ.)
- High switching rate : $t_f = 180ns$ (typ.)
- No secondary breakdown
- For low voltage driving ($V_{GS} = 4V$)

■ Application

- DC-DC converter
- No contact relay
- Solenoid drive
- Motor drive

■ Package Dimensions



■ Absolute Maximum Ratings (Tc=25°C)

| Item | Symbol | Value | Unit |
|----------------------|--------------------|------------|------|
| Drain-source voltage | V_{DSS} | 150 | V |
| Gate-source voltage | V_{GSS} | ± 20 | V |
| Drain current | DC | I_D | 20 |
| | Peak-to-peak value | I_{DP} | 40 |
| Power dissipation | Tc=25°C | P_D | 45 |
| | Ta=25°C | | 2.0 |
| Channel temperature | T_{ch} | 150 | °C |
| Storage temperature | T_{stg} | -55 ~ +150 | °C |

■ Electrical Characteristics (Tc=25°C)

| Item | Symbol | Condition | min. | typ. | max. | Unit |
|------------------------------|---------------|---------------------------------------|------|------|---------|----------|
| Drain current | I_{DSS} | $V_{DS} = 130V, V_{GS} = 0$ | | | 10 | μA |
| Gate-source current | I_{GSS} | $V_{GS} = \pm 20V, V_{DS} = 0$ | | | ± 1 | μA |
| Drain-source voltage | V_{DSS} | $I_D = 1mA, V_{GS} = 0$ | 150 | | | V |
| Gate threshold voltage | V_{th} | $V_{DS} = 10V, I_D = 1mA$ | 1 | | 2.5 | V |
| Drain-source ON resistance | $R_{DS(on)1}$ | $V_{GS} = 10V, I_D = 10A$ | | 0.08 | 0.12 | Ω |
| Drain-source ON resistance | $R_{DS(on)2}$ | $V_{GS} = 4V, I_D = 10A$ | | 0.09 | 0.135 | Ω |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS} = 10V, I_D = 10A$ | 10 | 20 | | S |
| Input capacitance | C_{iss} | $V_{DS} = 10V, V_{GS} = 0, f = 1MHz$ | | 3450 | | pF |
| Output capacitance | C_{oss} | | 600 | | pF | |
| Reverse transfer capacitance | C_{rss} | | 150 | | pF | |
| Turn-on time | t_{on} | $V_{GS} = 10V, I_D = 10A$ | | 90 | | ns |
| Fall time | t_f | | 180 | | ns | |
| Delay time | $t_d(off)$ | $V_{DD} \approx 100V, R_L = 10\Omega$ | | 770 | | ns |



