# 2SK3064G

## Silicon N-channel MOSFET

For switching circuit

For rechargeable buttery pack (Li<sup>+</sup> ion buttery, etc.)

#### ■ Features

- ullet High gate-source voltage (Drain open)  $V_{GSO}$
- ullet Low gate threshold voltage  $V_{\text{th}}$

### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                        | Symbol           | Rating      | Unit |  |
|----------------------------------|------------------|-------------|------|--|
| Drain-source surrender voltage   | V <sub>DSS</sub> | 30          | V    |  |
| Gate-source voltage (Drain open) | $V_{GSO}$        | ±20         | V    |  |
| Drain current                    | $I_D$            | 100         | mA   |  |
| Peak drain current               | $I_{DP}$         | 200         | mA   |  |
| Power dissipation                | $P_{\mathrm{D}}$ | 150         | mW   |  |
| Channel temperature              | $T_{ch}$         | 150         | °C   |  |
| Storage temperature              | $T_{stg}$        | -55 to +150 | °C   |  |

### ■ Package

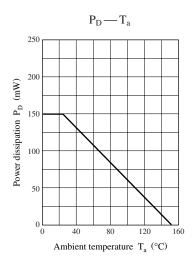
- Code SMini3-F2
- Marking Symbol: 2D
- Pin Name
  - 1: Gate
  - 2: Source
  - 3: Drain

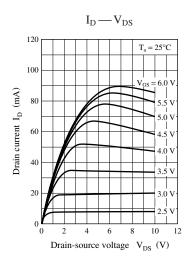
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

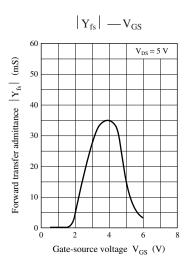
| Parameter                   | Symbol           | Conditions   | Min | Тур | Max  | Unit |
|-----------------------------|------------------|--|-----|-----|------|------|
| Drain-source cutoff current | $I_{DSS}$        | $V_{DS} = 30 \text{ V}, V_{GS} = 0 \text{ V}$                |     |     | 0.1  | μΑ   |
| Gate-source cutoff current  | $I_{GSS}$        | $V_{GS} = \pm 20 \text{ V}, V_{DS} = 0 \text{ V}$            |     |     | ±1.0 | μΑ   |
| Gate threshold voltage      | V <sub>th</sub>  | $V_{DS} = 5 \text{ V}, I_{D} = 1 \mu A$                      | 1.0 |     | 2.0  | V    |
| Forward transfer admittance | Yfs              | $V_{DS} = 5 \text{ V}, I_{D} = 10 \text{ mA}$                | 15  |     |      | mS   |
| ON resistance               | Ron              | $V_{GS} = 5 \text{ V}, I_D = 10 \text{ mA}$                  |     | 30  | 50   | Ω    |
| Turn-on time                | t <sub>on</sub>  | $V_{DD} = 5 \text{ V}, V_{GS} = 0 \text{ V to 5 V}$          |     | 150 |      | ns   |
|                             |                  | $R_L = 200 \Omega$   |     |     |      |      |
| Turn-off time               | t <sub>off</sub> | $V_{DD} = 5 \text{ V}, V_{GS} = 5 \text{ V to } 0 \text{ V}$ |     | 35  |      | ns   |
|                             |                  | $R_L = 200 \Omega$   |     |     |      |      |

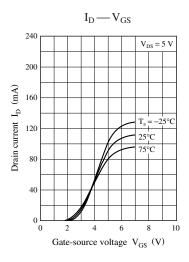
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

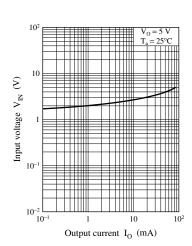
<sup>2.</sup> Observe precautions for handling. Electrostatic sensitive devices.





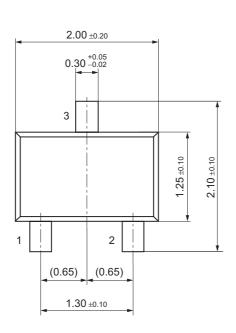


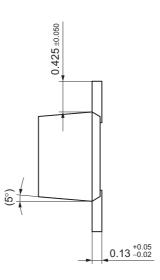




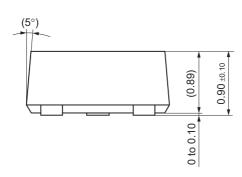
2 SJF00065AED

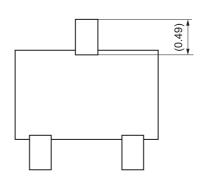
SMini3-F2 Unit: mm











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