

2SJ0536

Silicon P-Channel MOS FET

Secondary battery pack (Li ion battery, etc.)

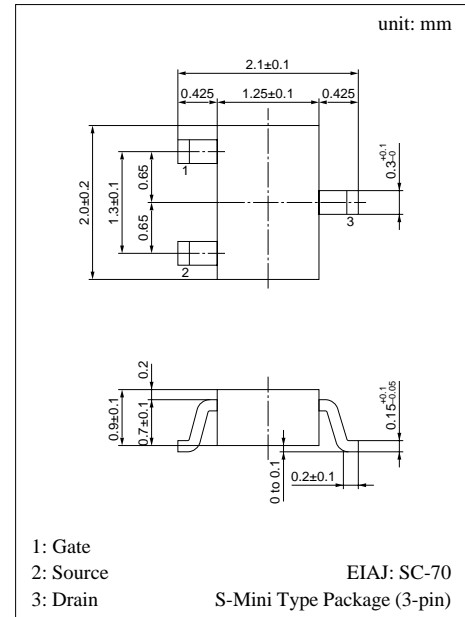
For switching

■ Features

- High-speed switching
- S-mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.
- Low-voltage drive (V_{th} : -1 to 2V)
- Low Ron

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

| Parameter | Symbol | Rated | Unit |
|-----------------------------|-----------|-------------|------------------|
| Drain to Source voltage | V_{DS} | -30 | V |
| Gate to Source voltage | V_{GSO} | ± 20 | V |
| Drain current | I_D | -100 | mA |
| Max drain current | I_{DP} | -200 | mA |
| Allowable power dissipation | P_D | 150 | mW |
| Channel temperature | T_{ch} | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

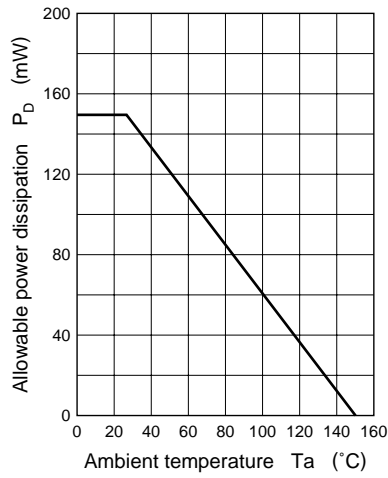


Marking Symbol: 2C

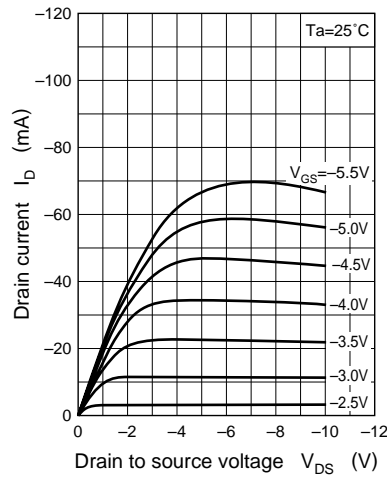
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Conditions | min | typ | max | Unit |
|-------------------------------|--------------|--|-----|-----|---------|---------------|
| Drain current | I_{DSS} | $V_{DS} = -30\text{V}, V_{GS} = 0$ | | | -0.1 | μA |
| Gate cut-off current | I_{GSS} | $V_{GS} = \pm 20\text{V}, V_{DS} = 0$ | | | ± 1 | μA |
| Gate threshold voltage | V_{th} | $V_{DS} = -5\text{V}, I_D = -1\mu\text{A}$ | -1 | | -2 | V |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS} = -5\text{V}, I_D = -10\text{mA}$ | 8 | | | mS |
| Drain to source ON-resistance | $R_{DS(on)}$ | $V_{GS} = -5\text{V}, I_D = -10\text{mA}$ | | 50 | 75 | Ω |
| Turn-on time | t_{on} | $V_{DD} = -5\text{V}, V_{GS} = -5$ to $0\text{V}, R_L = 200\Omega$ | | 100 | | μs |
| Turn-off time | t_{off} | $V_{DD} = -5\text{V}, V_{GS} = -5$ to $0\text{V}, R_L = 200\Omega$ | | 25 | | μs |

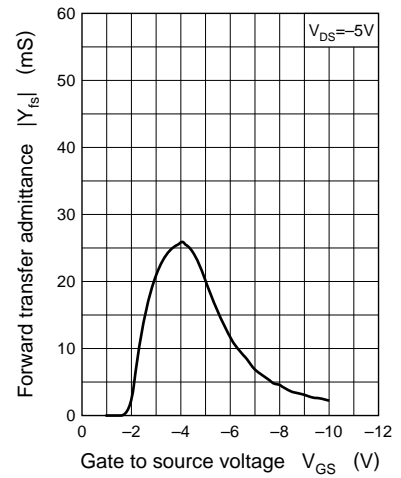
$P_D - T_a$



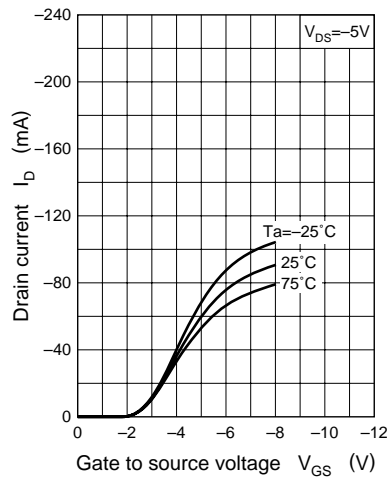
$I_D - V_{DS}$



$|Y_{fs}| - V_{GS}$



$I_D - V_{GS}$



$V_{IN} - I_O$

