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# 2SK3064

## Silicon N-channel MOSFET

For switching circuit

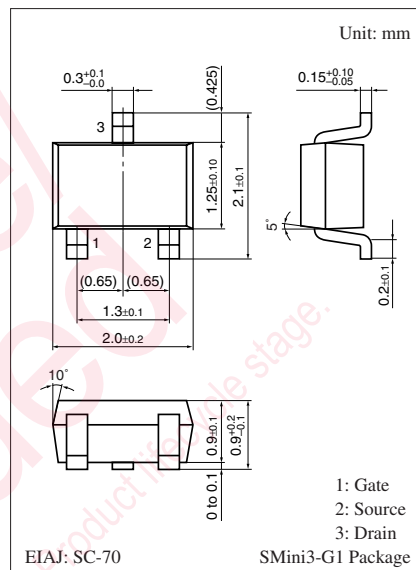
For rechargeable battery pack (Li<sup>+</sup> ion battery, etc.)

### ■ Features

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

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

Parameter	Symbol	Rating	Unit
Drain-source surrender voltage	$V_{DSS}$	30	V
Gate-source voltage (Drain open)	$V_{GSO}$	$\pm 20$	V
Drain current	$I_D$	100	mA
Peak drain current	$I_{DP}$	200	mA
Power dissipation	$P_D$	150	mW
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



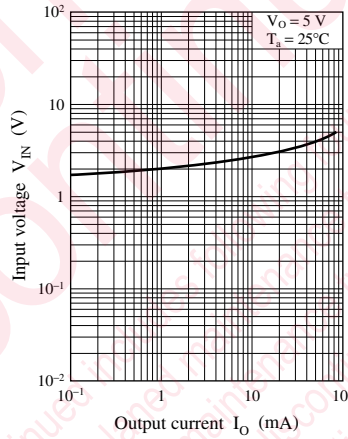
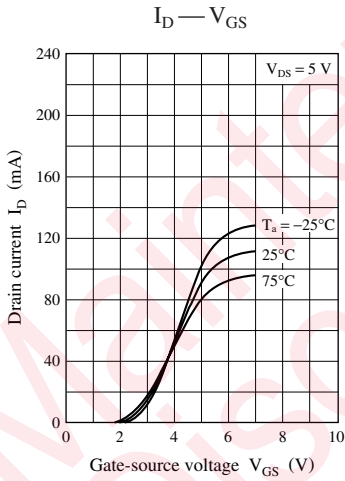
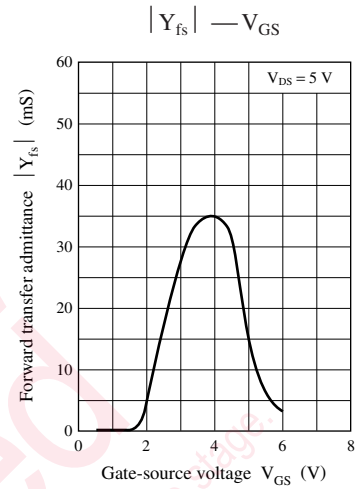
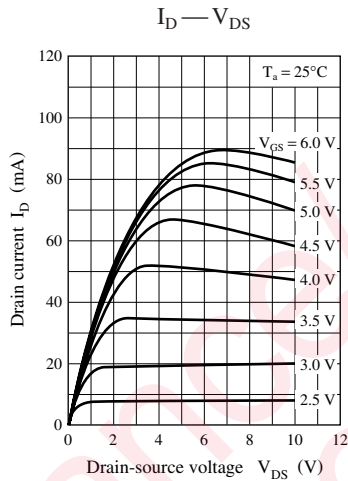
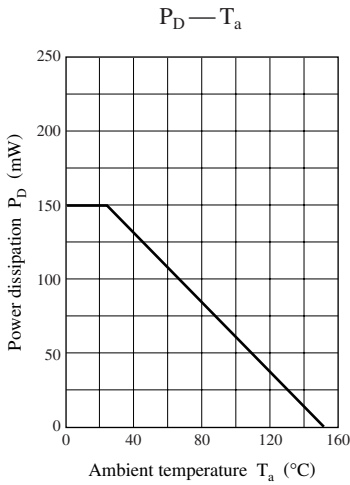
Marking symbol: 2D

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source cutoff current	$I_{DSS}$	$V_{DS} = 30\text{ V}, V_{GS} = 0\text{ V}$			0.1	$\mu\text{A}$
Gate-source cutoff current	$I_{GSS}$	$V_{GS} = \pm 20\text{ V}, V_{DS} = 0\text{ V}$			$\pm 1.0$	$\mu\text{A}$
Gate threshold voltage	$V_{th}$	$V_{DS} = 5\text{ V}, I_D = 1\text{ }\mu\text{A}$	1.0		2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 5\text{ V}, I_D = 10\text{ mA}$	15			mS
ON resistance	$R_{on}$	$V_{GS} = 5\text{ V}, I_D = 10\text{ mA}$		30	50	$\Omega$
Turn-on time	$t_{on}$	$V_{DD} = 5\text{ V}, V_{GS} = 0\text{ V to } 5\text{ V}$ $R_L = 200\text{ }\Omega$		150		ns
Turn-off time	$t_{off}$	$V_{DD} = 5\text{ V}, V_{GS} = 5\text{ V to } 0\text{ V}$ $R_L = 200\text{ }\Omega$		35		ns

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

2. Observe precautions for handling. Electrostatic sensitive devices.





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