

2SK3064

Silicon N-Channel MOS FET

Secondary battery pack (Li ion battery, etc.)

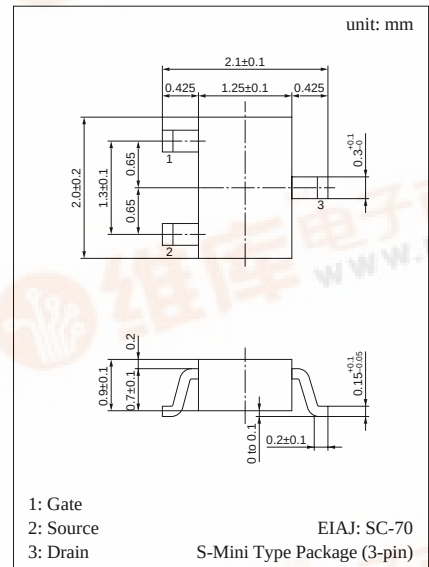
For switching

■ 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 R_{on}

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

Parameter	Symbol	Ratings	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	$^\circ\text{C}$

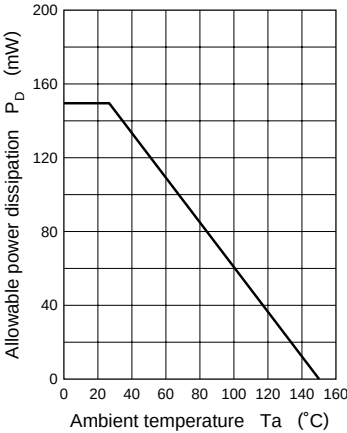


Marking Symbol: 2D

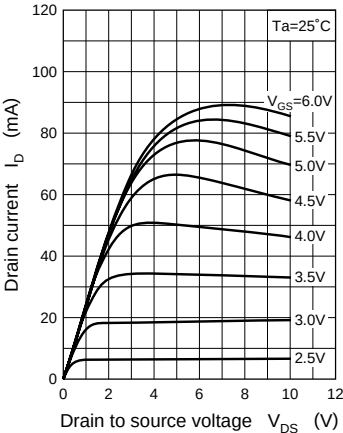
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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} $	$V_{DS} = 5\text{V}, I_D = 10\text{mA}$	15			mS
Drain to source ON-resistance	$R_{DS(on)}$	$V_{DS} = 5\text{V}, I_D = 10\text{mA}$		30	50	Ω
Turn-on time	t_{on}	$V_{DD} = 5\text{V}, V_{GS} = 0 \text{ to } 5\text{V}, R_L = 200\Omega$		150		ns
Turn-off time	t_{off}	$V_{DD} = 5\text{V}, V_{GS} = 0 \text{ to } 5\text{V}, R_L = 200\Omega$		35		ns

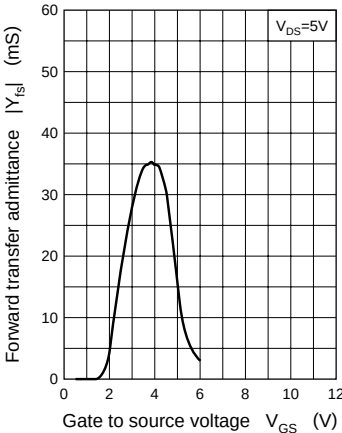
$P_D - T_a$



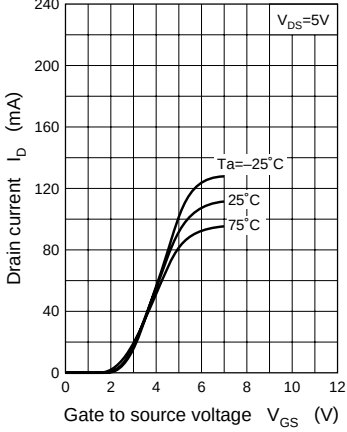
$I_D - V_{DS}$



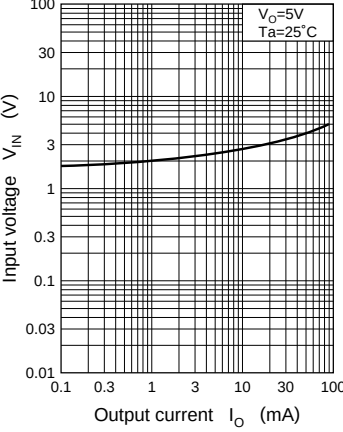
$|Y_{fs}| - V_{GS}$



$I_D - V_{GS}$



$V_{IN} - I_O$



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