

## 2SJ0536

## Silicon P-Channel MOS FET

Secondary battery pack (Li ion battery, etc.)

For switching

## ■ Features

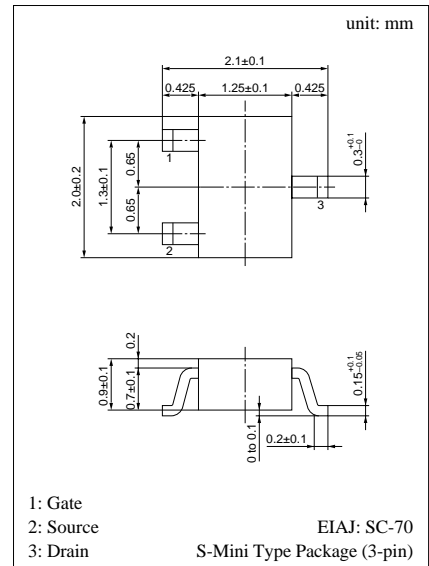
- High-speed switching
- S-mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.
- Low-voltage drive ( $V_{th}$ : -1 to 2V)
- Low  $R_{on}$

■ 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	$V_{GSO}$	$\pm 20$	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	$^\circ\text{C}$

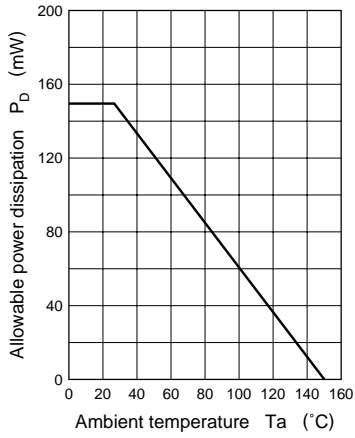
■ Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain current	$I_{DSS}$	$V_{DS} = -30\text{V}$ , $V_{GS} = 0$			-0.1	$\mu\text{A}$
Gate cut-off current	$I_{GSS}$	$V_{GS} = \pm 20\text{V}$ , $V_{DS} = 0$			$\pm 1$	$\mu\text{A}$
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	$\Omega$
Turn-on time	$t_{on}$	$V_{DD} = -5\text{V}$ , $V_{GS} = -5$ to $0\text{V}$ , $R_L = 200\Omega$		100		$\mu\text{s}$
Turn-off time	$t_{off}$	$V_{DD} = -5\text{V}$ , $V_{GS} = -5$ to $0\text{V}$ , $R_L = 200\Omega$		25		$\mu\text{s}$

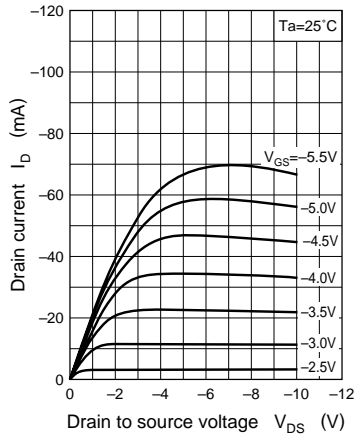


Marking Symbol: 2C

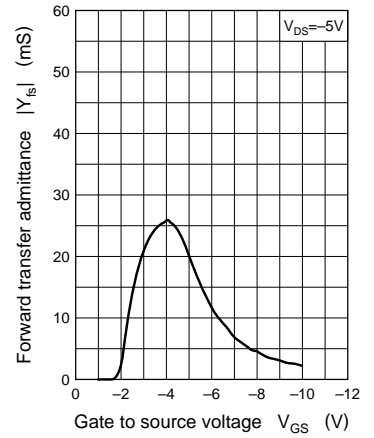
$P_D - T_a$



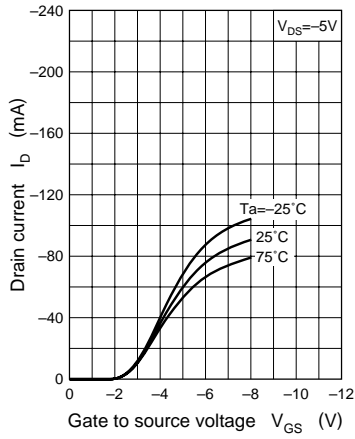
$I_D - V_{DS}$



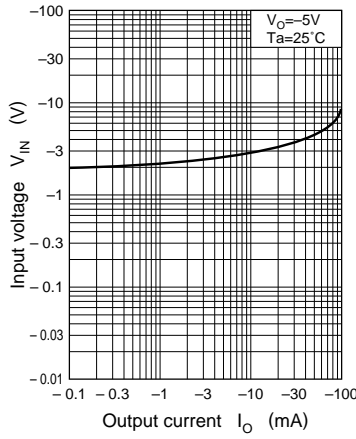
$|Y_{fs}| - V_{GS}$



$I_D - V_{GS}$



$V_{IN} - I_O$



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