# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

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## **2SJ0536**

Silicon P-channel MOSFET

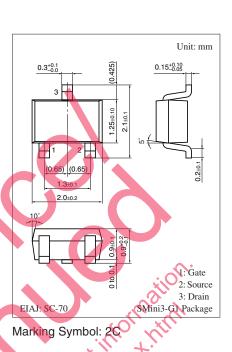
Secondary battery packs (Li ion battery, etc.) For switching circuits

#### 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<sub>th</sub>: -1.0 V to 2.0 V)
- Low ON resistance

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

Parameter	Symbol	Rating	Unit		
Drain-sourse surrender voltage	V <sub>DSS</sub>	-30	V		
Gate-source voltage (Drain open)	V <sub>GSO</sub>	±20	V		
Drain current	ID	-100	mA		
Peak drain current	I <sub>DP</sub>	-200	mA		
Power dissipation	PD	150	mW		
Channel temperature	T <sub>ch</sub>	150	°C		
Storage temperature	T <sub>stg</sub>	-55 to +150	°C		



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

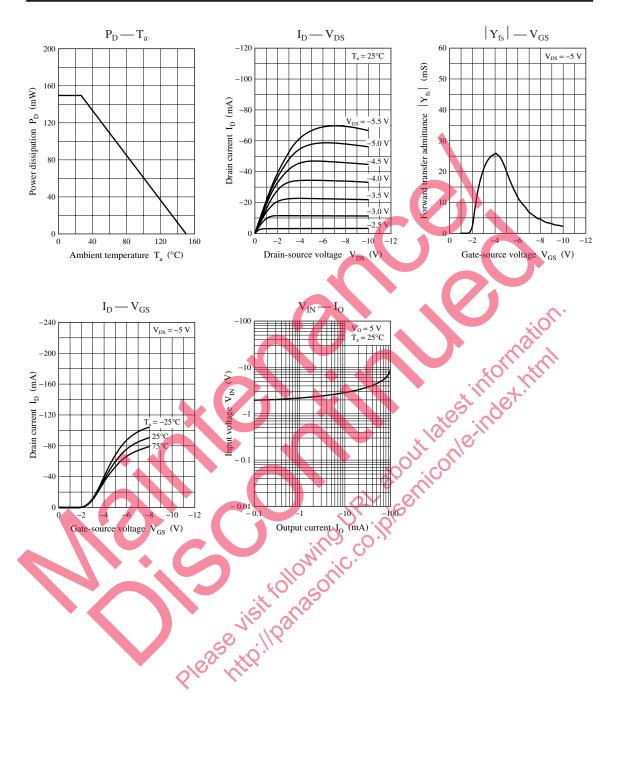
	ID 100 mil		$\sim$	- XV	•			
Peak drain current	I <sub>DP</sub> –200 mA Marking	Symbol	: 20	Nr.				
Power dissipation	P <sub>D</sub> 150 mW	చ	N'sé	,† ·				
Channel temperature	T <sub>ch</sub> 150 °C	xes	$\cdot 0_{\gamma_i}$					
Storage temperature	$T_{stg}$ -55 to +150 °C	10 1e						
Drain current $T_D$ $100^\circ$ $mrr<$ Peak drain current $I_{DP}$ $-200^\circ$ $mA^\circ$ Marking Symbol: 2QPower dissipation $P_D$ $150^\circ$ $mW^\circ$ Channel temperature $T_{ch}$ $150^\circ$ $mW^\circ$ Storage temperature $T_{stg}$ $-55$ to $+150^\circ$ $\circ$ CElectrical Characteristics $T_a = 25^\circ$ C $\pm 3^\circ$ C $2D_{chi}$								
Parameter	Symbol Conditions	Min	Тур	Max	Unit			
Drain-source cutoff current	$I_{\rm DSS}$ $V_{\rm DS} = -30 \text{ V}, V_{\rm SS} = 0$			- 0.1	μΑ			
Gate-source cutoff current	$I_{GSS} = \pm 20 \text{ V} \cdot \text{V}_{DS} = 0^{-1}$			±1.0	μΑ			
Gate threshold voltage	$V_{th}$ $V_{DS} = -5$ V, $I_D = -1 \mu A$	-1.0		-2.0	V			
Forward transfer admittance	$ Y_{\rm fs} $ $V_{\rm DS} = -5 \text{ V}, I_{\rm D} = -10 \text{ mA}$	8			mS			
Drain-source ON resistance	$R_{DS(on)}$ $V_{GS} = -5$ $V_{CS}$ $T_D = -10$ mA		50	75	Ω			
Turn-on time	$t_{on} = V_{DD} = 5 V, V_{GS} = 0 V \sim -5 V$ $R_L = 200 \Omega$		100		μs			
Turn-off time	$V_{DD} = -5 V, V_{GS} = -5 V \sim 0 V$ $R_L = 200 \Omega$		25		μs			

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.

#### 2SJ0536

### Panasonic



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