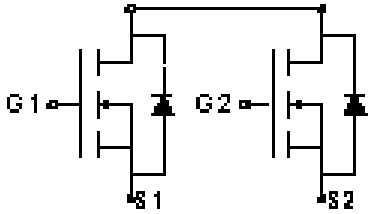
20V，30mΩ，Dual N-channel MOSFET

1. Features

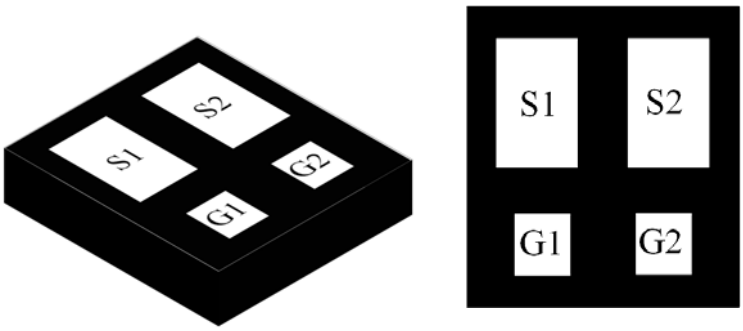
- 20V MOSFET technology
- Low on-state resistance
- Vgs±10V



Schematic

2. Applications

- Lithium-ion battery charging and discharging switch



Product Diagram

3. Shipment Information

Operating Junction Temperature Range	Package	Order Type	Seal
-55°C ~ +150°C	CSDFN	2030F	2030F

4. Absolute max Ratings(TJ = 25°C unless otherwise noted)

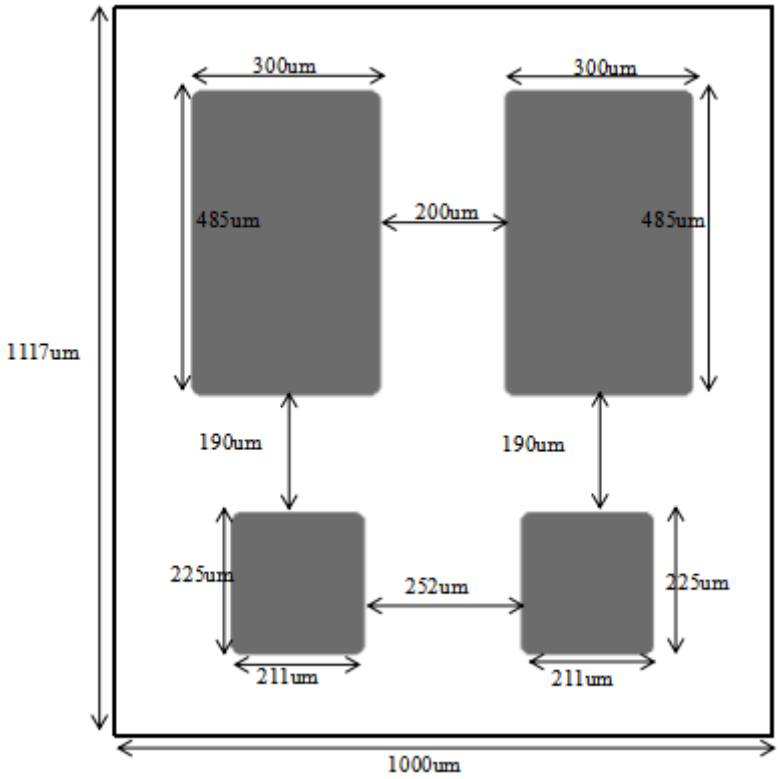
Parameter	Symbol	Maximum	Units
Source to Source Voltage	V_{SSS}	20	V
Gate to Source Voltage	V_{GS}	±10	V
Source Current (DC)(V_{GS} =4.5V，@T_a=25°C)	I_S	6	A
Source Current (DC)(V_{GS} =4.5V，@T_a=70°C)	I_S	4.8	A
Source Current (Pulse) PW ≤10μs, duty cycle≤1%	I_{SP}	20	A
Junction Temperature	T_j	-55 ~ +150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

5. Electrical characteristics(TJ = 25°C unless otherwise noted)

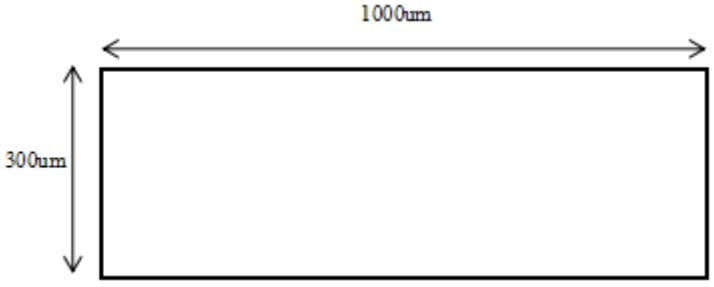
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Source to Source Breakdown Voltage	$B_{(BR)SSS}$	V_{GS} = 0, I_D = 250μA	20	20.5		V
Zero-Gate Voltage Source Current	I_{SSS}	V_{DS} = 16V, V_{GS} = 0	-	-	1	μA
Gate to Source Leakage Current	I_{GSS}	V_{GS} = ±10V,V_{DS} = 0	-	-	±1	uA
Temperature Coefficient of Breakdown Voltage	$\triangle B_{(BR)SSS}$ /$\triangle T_j$	Point of reference 25°C I_D =1mA	-	0.03	-	V/°C
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS}, I_D = 250μA	0.4	0.65	1.0	V
Static Source to Source On-State Resistance	$R_{SS(ON)}$	V_{GS} = 4.5V,I_D = 6A	-	30	40	mΩ
		VGS=3.8V, I_D = 3A		33	48	mΩ
		V_{GS} = 2.5V,I_D = 3A	-	43	65	mΩ

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Transconductance	g_{fs}	V_{DS} = 5V, I_D = 4.5A	-	10	-	S
Forward Source to Source Voltage	$VF_{(S-S)}$	I_S=1.0A, V_{GS}=0V T_j=25°C	-	0.72	1.2	V

6. Package Dimensions（Thickness：300um）



Bottom View



Side View

Attention

The information herein is given to describe certain components and shall not be considered as warranted characteristics.
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