

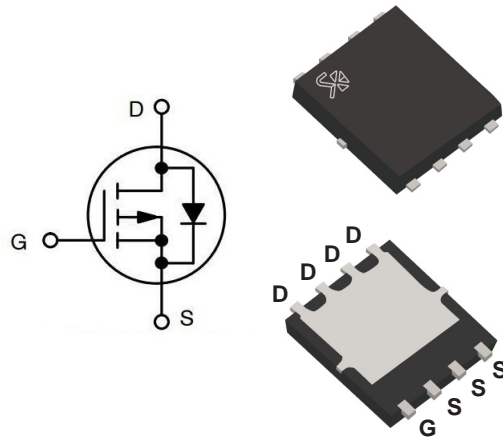
## 30V P-Channel MOSFET

### Feature

- 30V P-Channel MOSFET High Dense Design.
- Ultra low On-Resistance.
- Reliable and Rugged.

### Applications

- Power Management in Notebook Computer, and Portable Equipment and Battery Systems.



PDFN5060

### Electrical Characteristics

Absolute Maximum Ratings (T <sub>C</sub> =25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Drain-Source Voltage	V <sub>DSS</sub>	-30V	V
Gate-Source Voltage	V <sub>GSS</sub>	±20V	V
Drain Current-Continuous @ T <sub>C</sub> =25°C	I <sub>D</sub>	-35	A
Drain Current-Pulsed	I <sub>DM</sub>	-70	A
Operating Junction Temperature Range	T <sub>J</sub>	-55 to 150°C	°C

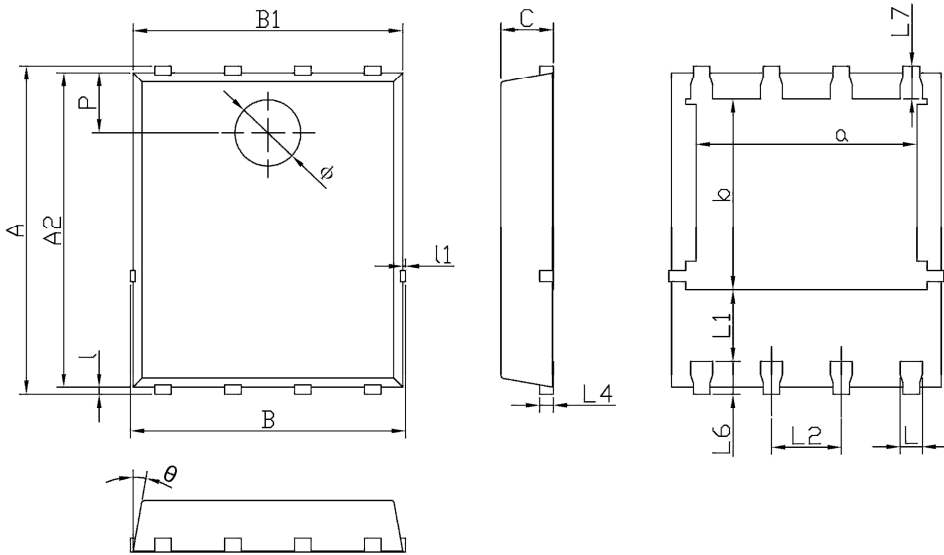
### Electrical Characteristics(T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
OFF CHARACTERISTIC						
Drain-Source Breakdown Voltage	B <sub>V</sub> DSS	V <sub>GS</sub> =0V , I <sub>D</sub> =-250uA	-30	-	-	V
Drain-Source Leakage Current	I <sub>DSS</sub>	V <sub>DS</sub> =-24V, V <sub>GS</sub> =0V, T <sub>J</sub> =25°C	-	-	1	uA
Gate-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V , V <sub>DS</sub> =0V	-	-	±100	nA
ON CHARACTERISTIC						
Gate Threshold Voltage	V <sub>GS(TH)</sub>	V <sub>GS</sub> =V <sub>DS</sub> , I <sub>D</sub> =-250uA	-1.0	-	-2.5	V
Static Drain-Source On-Resistance	R <sub>DS(ON)</sub>	V <sub>GS</sub> =-10V , I <sub>D</sub> =-6A	-	-	20	mΩ
		V <sub>GS</sub> =-4.5V , I <sub>D</sub> =-4A	-	-	32	
DYNAMIC CHARACTERISTICS						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =-15V, V <sub>GS</sub> =0V, f=1MHz	-	1345	-	pF
Output Capacitance	C <sub>oss</sub>		-	194	-	
Reverse Transfer Capacitance	C <sub>rss</sub>		-	158	-	
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
Drain-Source Diode Forward Voltage	V <sub>SD</sub>	V <sub>GS</sub> =0V, I <sub>S</sub> =-1.0A	-	-	-1.2	V

Note: 1. The data tested by pulsed, pulse width ≤ 300us, duty cycle ≤ 2%.  
2. R<sub>dson</sub> calculated by package type.

PDFN5060

Unit:mm



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
a	3.91	4.01	4.11
A2	5.70	5.75	5.80
B	4.90	5.00	5.10
b	3.37	3.47	3.57
B1	4.80	4.90	5.00
C	0.90	0.95	1.00
L	0.35	0.40	0.45
l	0.06	0.13	0.20
L1	1.10	-	-
l1	-	-	0.10
L2	1.17	1.27	1.37
L4	0.21	0.26	0.34
L6	0.51	0.61	0.71
L7	0.51	0.61	0.71
P	1.00	1.10	1.20
$\theta$	8°	10°	12°
$\phi$	1.10	1.20	1.30