

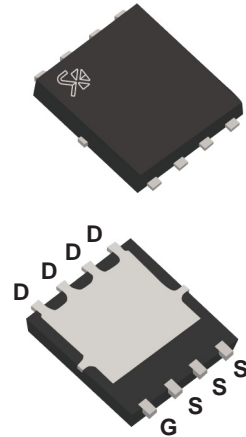
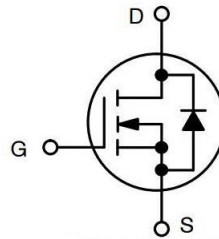
N-Channel MOSFET

Feature

- 150V N-Channel MOSFET
- $R_{DS(ON)} = 105m\Omega$ (typ.) @ $V_{GS} = 10V$
- Reliable and Rugged

Applications

- DC/DC for Boost Converters
- Synchronous Rectifiers for SMPS
- LED Backlighting



PDFN5060

1. Absolute Maximum Ratings ($T_A=25^\circ C$ Unless Otherwise Noted)

Symbol	Parameter	Rating	Unit
V_{DSS}	Drain-Source Voltage	150	V
V_{GSS}	Gate-Source Voltage	± 20	
I_D	Continue Drain Current	14	A
I_{DM}^a	Pulsed Drain Current	34	
T_J	Maximum Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature Range	-55 to 150	
$R_{\theta JC}$	Thermal Resistance- Junction to Case (PDFN5*6)	2.7	

2. Static Electrical Characteristics ($T_A=25^\circ C$ Unless Otherwise Noted)

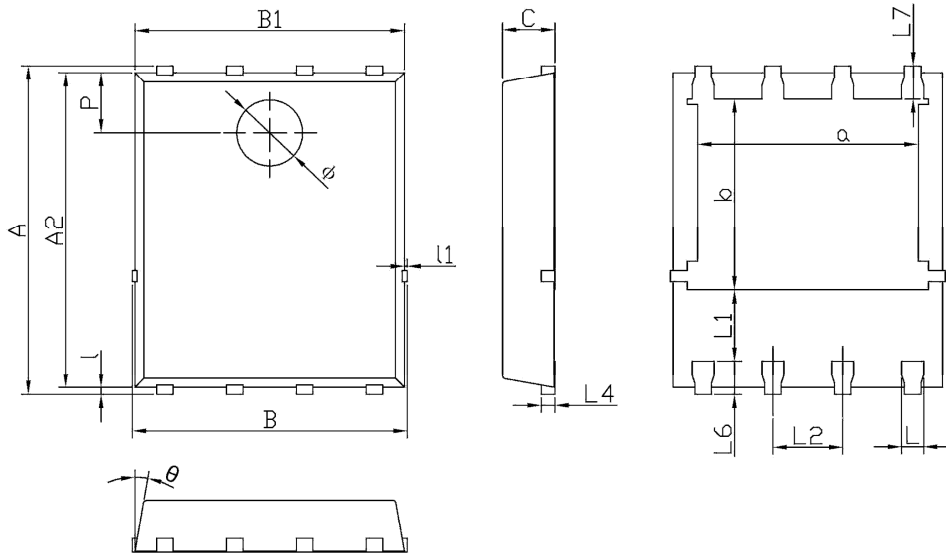
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
Static Characteristics						
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_{DS}=250\mu A$	150	-	-	V
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=120V, V_{GS}=0V$ $T_J=85^\circ C$	-	-	1	μA
			-	-	30	
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_{DS}=250\mu A$	1.3	1.8	2.5	V
I_{GSS}	Gate Leakage Current	$V_{GS}=\pm 20V, V_{DS}=0V$	-	-	± 100	nA
$R_{DS(ON)}$	Drain-Source On-state Resistance	$V_{GS}=10V, I_{DS}=1A$	-	105	130	$m\Omega$
V_{SD}	Diode Forward Voltage	$I_{SD}=1A, V_{GS}=0V$	-	0.75	1.1	V

*Note:

a : Current maybe limit by junction temperature

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
θ	8°	10°	12°
ϕ	1.10	1.20	1.30