SKQ45N06AD

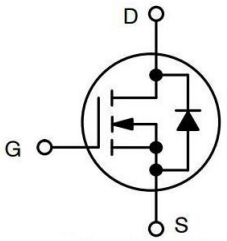
60V N-Channel MOSFET

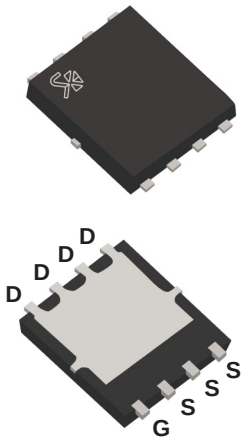
Feature

- 60 V N-Channel MOSFET High Dense Design.
- Reliable and Rugged

Applications

- Secondary Side Synchronous Rectification.
- DC-DC Converter.
- Motor Control.
- Load Switching





PDFN5060

Absolute Maximum Ratings (T_C=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	60	V
Gate-Source Voltage	V_{GSS}	±20	V
Power Dissipation	P_D	69	W
Operating Junction Temperature Range	T_J	-50 to 150	°C

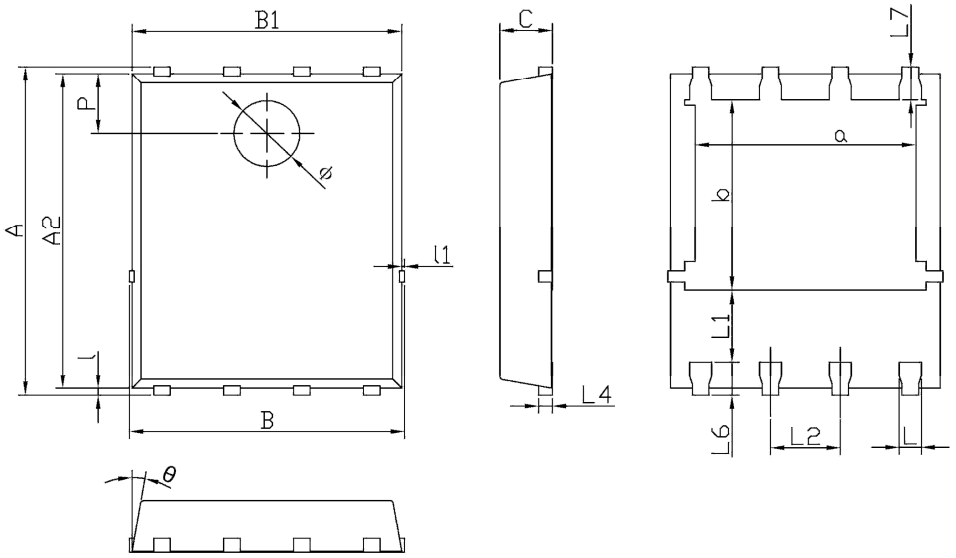
Electrical Characteristics(T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
OFF CHARACTERISTIC						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V , ID=250uA	60	-	-	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=48V, V_{GS}=0V, T_J=25°C	-	-	1	uA
Gate-Source Leakage Current	I_{GSS}	V_{GS}=±20V , V_{DS}=0V	-	-	100	nA
ON CHARACTERISTIC						
Gate Threshold Voltage	$V_{GS(TH)}$	V_{GS}=V_{DS}, I_D=250uA	1.0	-	2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=10V , I_D=12A	-	9	11	mΩ
		V_{GS}=4.5V , I_D=10A	-	14	17	mΩ
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V, I_S=1A	-	0.7	1.2	V

Note：
1. The data tested by pulsed , pulse width ≦ 300us , duty cycle ≦ 2%.
2. RDSON calculated by DFN56-8L 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
θ	8°	10°	12°
Φ	1.10	1.20	1.30