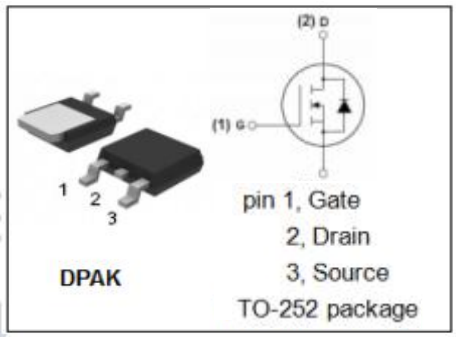
Toohong

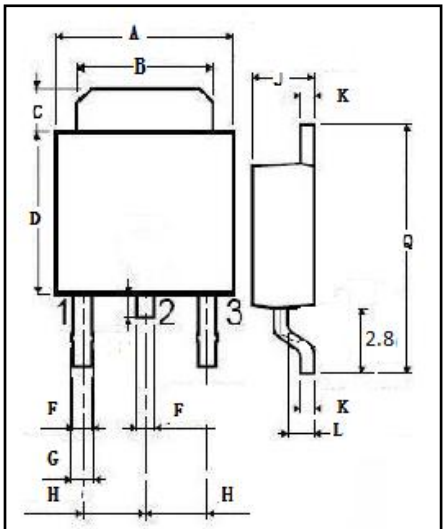
FQD50N06

N-Channel MOSFET Transistor

- **FEATURES**
- Drain Source Voltage-
  : V_{DSS}= 60V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 22mΩ (Max)
- Fast Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



- **APPLICATIONS**
- High current , high speed switching
- Switch mode power supplies
- DC-DC converters for telecom, industrial,and lighting equipment ideal for monitor's B+ function



	mm	
DIM	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage-Continuous	±25	V
I_D	Drain Current-Continuous	50	A
I_{DM}	Drain Current-Single Plused	200	A
P_D	Total Dissipation @T_C=25℃	83	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.8	℃/W

• ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D=250μA	60			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=250uA	2		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 25A			22	mΩ
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±25V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=60V; V_{GS}= 0 V_{DS}=48V; V_{GS}= 0;T_C=150℃			1 10	μA
V_{SD}	Diode Forward On-voltage	I_F= 50A ;V_{GS}= 0			1.5	V