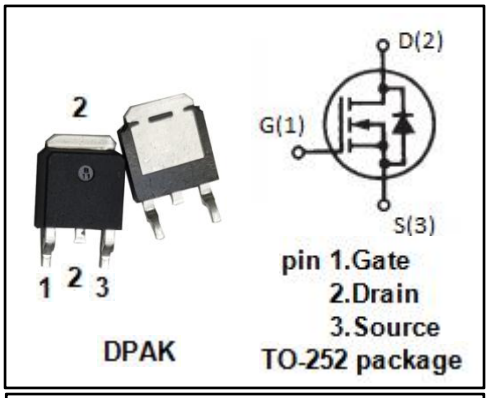
isc N-Channel MOSFET Transistor FDD3672



FEATURES

·Drain Current -I_D=44A@ T_C=25℃

·Drain Source Voltage -V_{DSS}=100V(Min)

·Static Drain-Source On-Resistance

-$R_{DS(on)}$ =28mΩ(Max)

DESCRIPTION

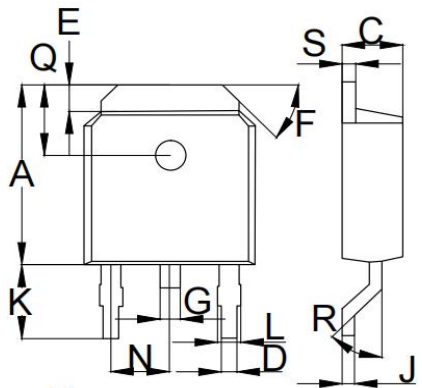
• Motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	100	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous	44	A
I_{DM}	Drain Current-Single Pluse	176	A
P_D	Total Dissipation @T_C=25℃	135	W
T_J	Max. Operating Junction Temperature	175	℃
T_{stg}	Storage Temperature	-55~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.11	℃/W



DIM	mm		
	MIN	TYP.	MAX
A	6.90	7.10	7.30
B	6.50	6.60	6.70
C	2.20	2.30	2.40
D	0.50	0.60	0.72
E	0.90	1.00	1.10
F		45°	
G	0.70	0.80	0.90
J	0.40	0.50	0.60
K	2.85	3.15	3.50
L	0.70	0.80	0.90
N	2.20	2.28	2.35
P		7°	
Q	2.75	2.80	2.85
R		50°	
S	0.40	0.50	0.60

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ELECTRICAL CHARACTERISTICS（T_C=25℃ unless otherwise specified）

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D=0.25mA	100	--	--	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 0.25mA	2.0	--	4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=10V; I_D=44A	--	--	28	mΩ
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=6V; I_D=21A	--	--	47	mΩ
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0	--	--	±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=80V; V_{GS}= 0	--	--	1	uA
V_{SD}	Forward On-Voltage	I_S=44A; V_{GS}= 0	--	--	1.25	V
V_{SD}	Forward On-Voltage	I_S=21A; V_{GS}= 0	--	--	1.0	V

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