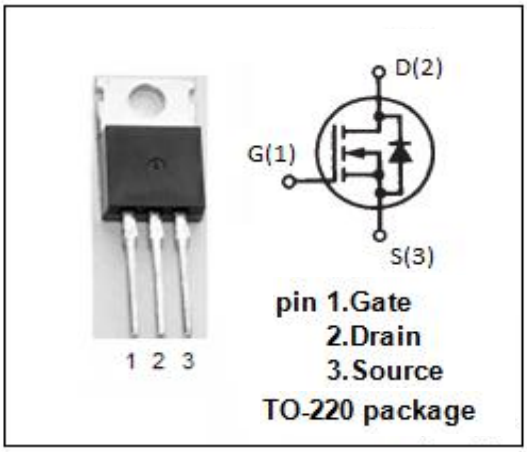
isc N-Channel MOSFET Transistor ERF2030



FEATURES

·Drain Current -I_D=18A@ T_C=25℃

·Drain Source Voltage -V_{DSS}=200V(Min)

·Static Drain-Source On-Resistance

-$R_{DS(on)}$ = 0.18Ω(Max)@V_{GS}= 10V

DESCRIPTION

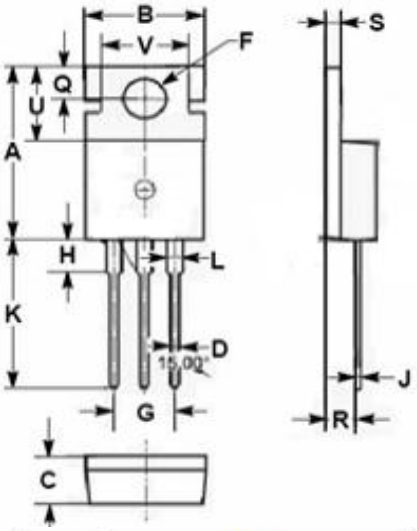
• Motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage-Continuous	±30	V
I_D	Drain Current-Continuous	18	A
I_{DM}	Drain Current-Single Pluse	72	A
P_D	Total Dissipation @T_C=25℃	100	W
T_J	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.25	℃/W



DIM	mm		
	MIN	TYP.	MAX
A	15.50	15.70	15.90
B	9.80	10.00	10.20
C	4.20	4.35	4.50
D	0.70	0.80	0.90
F	3.40	3.55	3.70
G	4.98	5.08	5.18
H	2.68	2.79	2.90
J	0.44	0.52	0.60
K	12.80	13.10	13.40
L	1.20	1.32	1.45
Q	2.70	2.80	2.90
R	2.30	2.50	2.70
S	1.29	1.32	1.35
U	6.45	6.55	6.65
V	8.66	8.76	8.86

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ELECTRICAL CHARACTERISTICS（T_C=25℃ unless otherwise specified）

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	200	--	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= 9A	--	0.18	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V;V_{DS}= 0	--	±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 200V; V_{GS}= 0	--	1	uA
V_{SD}	Forward On-Voltage	I_S= 9A; V_{GS}= 0	--	1.4	V

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