

isc N-Channel MOSFET Transistor

IRF200P222

FEATURES

- Drain Current $-I_D=182A@T_C=25^{\circ}C$
- Drain Source Voltage $-V_{DSS}=900V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)}=6.6m\Omega(\text{Max})@V_{GS}=10V$

DESCRIPTION

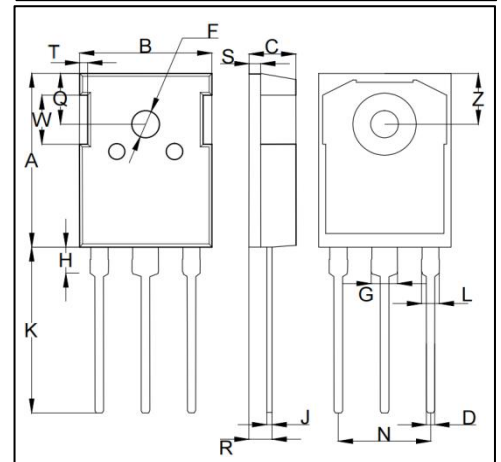
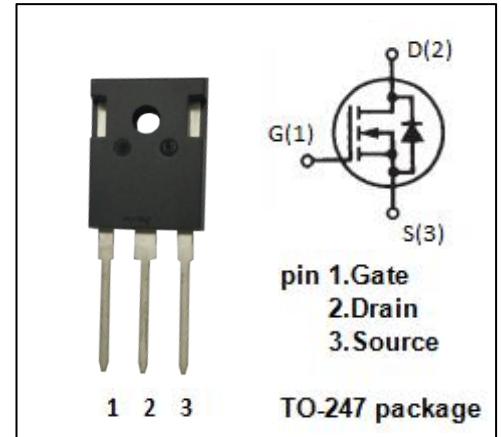
- Motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	182	A
I_{DM}	Drain Current-Single Pluse	728	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	556	W
T_J	Max. Operating Junction Temperature	175	$^{\circ}C$
T_{stg}	Storage Temperature	-55~175	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.27	$^{\circ}C/W$



DIM	mm		
	MIN	TYP.	MAX
A	19.80	20.65	21.50
B	15.40	15.65	15.90
C	4.70	5.00	5.30
D	0.90	1.08	1.26
F	3.50	3.70	3.90
G	2.70	3.00	3.30
H	3.90	4.00	4.10
J	0.50	0.60	0.70
K	19.50	20.00	20.50
L	1.90	2.05	2.20
N	10.80	10.90	11.00
Q	6.00	6.15	6.30
R	2.90	3.10	3.30
S	1.80	2.00	2.20
T	2.15	2.25	2.35
W	4.90	5.00	5.10
Z	6.00	6.15	6.30

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ELECTRICAL CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=1\text{mA}$	200	--	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D=270\mu\text{A}$	2.0	4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$; $I_D=82\text{A}$	--	6.6	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}$; $V_{DS}=0$	--	± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=160\text{V}$; $V_{GS}=0$	--	1.0	μA
V_{SD}	Forward On-Voltage	$I_S=82\text{A}$; $V_{GS}=0$	--	1.2	V

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