

isc N-Channel MOSFET Transistor

FMW60N070S2HF

FEATURES

- Drain Current : $I_D = 53.2A @ T_C = 25^\circ C$
- Drain Source Voltage
: $V_{DS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 70m\Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

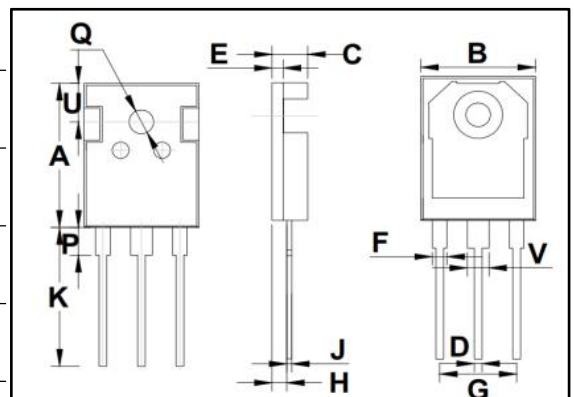
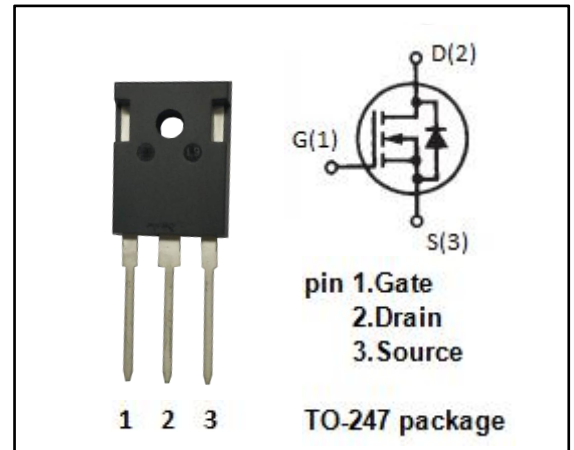
- motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	53.2	A
I_{DM}	Drain Current-Single Pluse	158	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	270	W
T_J	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.46	$^\circ C/W$



DIM	MM	
	MIN	MAX
A	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

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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	$V_{GS}=0$; $I_D=1\text{mA}$	600	--	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10\text{V}$; $I_D=1\text{mA}$	3.5	4.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$; $I_D=19.7\text{A}$	--	70	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 30\text{V}$; $V_{DS}=0$	--	± 0.1	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=600\text{V}$; $V_{GS}=0$	--	25	μA
V_{SD}	Forward On-Voltage	$I_S=39.4\text{A}$; $V_{GS}=0$	--	1.35	V

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