

## isc N-Channel MOSFET Transistor

# **FS70UM-2**

## **FEATURES**

∙Drain Current -I<sub>D</sub>=70A@ T<sub>C</sub>=25℃

·Drain Source Voltage -V<sub>DSS</sub>=100V(Min)

·Static Drain-Source On-Resistance

-R<sub>DS(on)</sub> =20mΩ(Max)

### DESCRIPTION

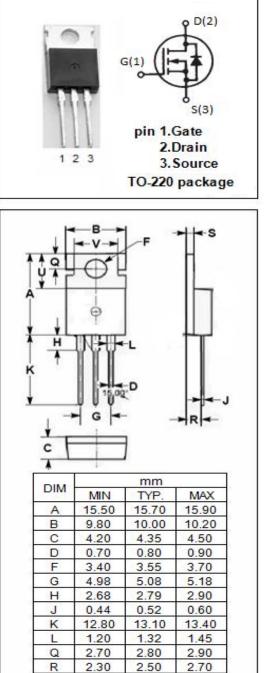
 Motor drive, DC-DC converter, power switch and solenoid drive.

### ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	100	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V
ID	Drain Current-Continuous	70	A
I <sub>DM</sub>	Drain Current-Single Pluse	280	A
PD	Total Dissipation @T <sub>c</sub> =25℃	125	W
TJ	Max. Operating Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C

#### **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.0	°C/W



S

U

V

1.29

6.45

8.66

1.32

6.55

8.76

1.35

6.65

8.86



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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> =1mA	100			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 1mA	2.0	3.0	4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =35A		14	20	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0			±0.1	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =100V; V <sub>GS</sub> = 0			0.1	mA
V <sub>SD</sub>	Forward On-Voltage	I <sub>s</sub> =35A; V <sub>GS</sub> = 0		1.0	1.5	V

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

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