

isc N-Channel MOSFET Transistor

FS70VSH-03

FEATURES

- Drain Current $-I_D=70A@T_C=25^{\circ}C$
- Drain Source Voltage $-V_{DSS}=30V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)}=14m\Omega(\text{Max})$

DESCRIPTION

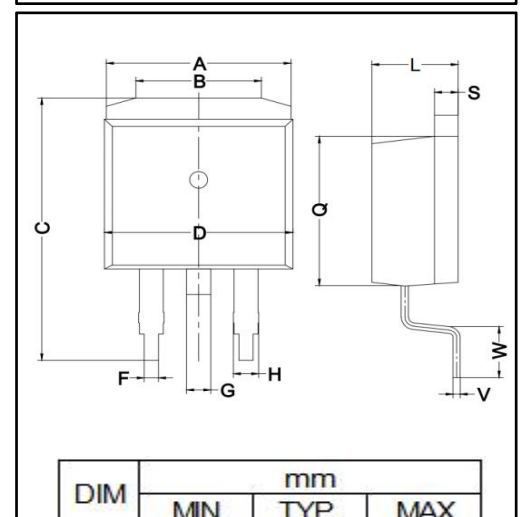
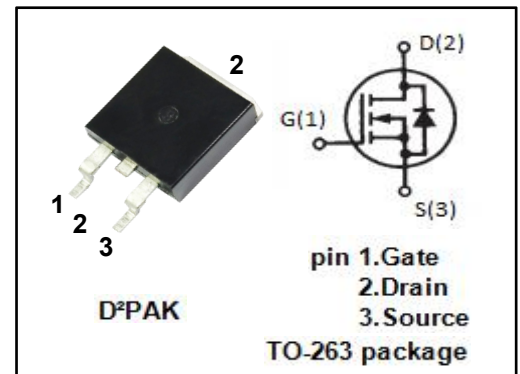
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	30	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	70	A
I_{DM}	Drain Current-Single Pluse	280	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	70	W
T_J	Max. Operating Junction Temperature	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	1.76	$^{\circ}C/W$



DIM	mm		
	MIN	TYP.	MAX
A	9.80	10.00	10.20
B	6.60	6.70	6.80
C	15.10	15.20	15.30
D	9.60	9.80	10.00
F	0.70	0.80	0.90
G	1.26	1.28	1.30
H	1.20	1.33	1.45
L	4.40	4.50	4.60
Q	9.20	9.25	9.30
S	1.25	1.30	1.35
V	0.40	0.50	0.60
W	2.60	2.70	2.80

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=1\text{mA}$	30	--	--	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D=1\text{mA}$	0.6	0.9	1.2	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=4\text{V}$; $I_D=35\text{A}$	--	10	14	$\text{m}\Omega$
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=4.5\text{V}$; $I_D=35\text{A}$	--	13	20	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}$; $V_{DS}=0$	--	--	± 0.1	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=30\text{V}$; $V_{GS}=0$	--	--	0.1	mA
V_{SD}	Forward On-Voltage	$I_S=35\text{A}$; $V_{GS}=0$	--	1.0	1.5	V

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