

isc N-Channel MOSFET Transistor

FS7SM-16A

FEATURES

- Drain Current $-I_D=7A@T_C=25^{\circ}C$
- Drain Source Voltage $-V_{DSS}=800V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)}=1.64\Omega(\text{Max})$

DESCRIPTION

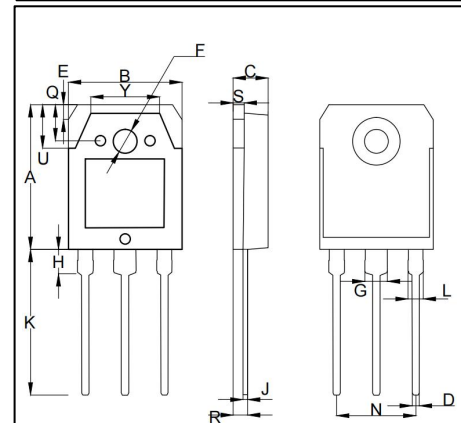
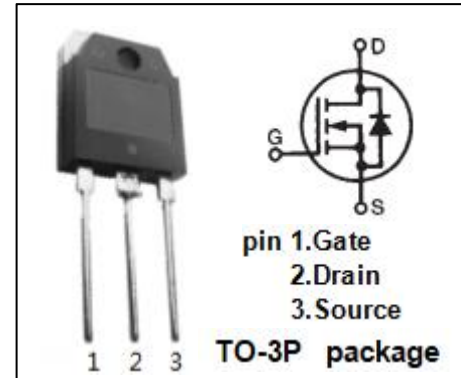
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	800	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	7	A
I_{DM}	Drain Current-Single Pluse	21	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	150	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	0.83	$^{\circ}C/W$



DIM	mm		
	MIN	TYP.	MAX
A	19.70	19.95	20.20
B	15.45	15.60	15.75
C	4.70	4.80	4.90
D	0.90	1.00	1.10
E	1.80	2.00	2.20
F	3.40	3.50	3.60
G	2.95	3.10	3.25
H	3.10	3.25	3.40
J	0.50	0.60	0.70
K	19.80	20.00	20.20
L	2.00	2.10	2.20
M	13.30	13.60	13.90
N	10.80	10.90	11.00
Q	4.25	4.68	5.10
R	1.75	2.03	2.30
S	1.40	1.50	1.60
U	5.90	6.05	6.20
Y	9.45	9.60	9.75

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ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =1mA	800	--	--	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 1mA	2.0	3.0	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =3A	--	1.26	1.64	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±25V; V _{DS} = 0	--	--	±10	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =800V; V _{GS} = 0	--	--	1	mA
V _{SD}	Forward On-Voltage	I _S =3A; V _{GS} = 0	--	1.0	1.5	V

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