

isc N-Channel MOSFET Transistor

FDD6676S

FEATURES

- Drain Current : $I_D=78A@ T_C=25^{\circ}C$
- Drain Source Voltage
: $V_{DSS}=30V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)}=6m\Omega (\text{Max}) @ V_{GS}=10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

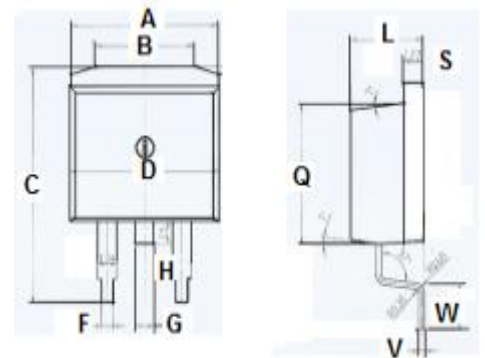
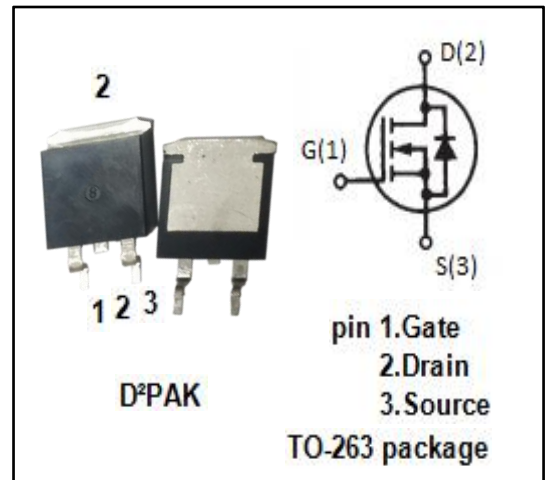
- motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	30	V
V_{GSS}	Gate-Source Voltage	± 16	V
I_D	Drain Current-Continuous;@ $T_C=25^{\circ}C$	78	A
I_{DM}	Drain Current-Single Pulsed	100	A
P_D	Total Dissipation	70	W
T_j	Operating Junction Temperature	-55~150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	1.8	$^{\circ}C/W$



DIM	mm	
	MIN	MAX
A	9.8	10.2
B	6.6	6.8
C	15.1	15.3
D	9.6	10
F	0.7	0.9
G	1.26	1.3
H	1.2	1.45
L	4.4	4.6
Q	9.2	9.3
S	1.25	1.35
V	0.4	0.6
W	2.6	2.8

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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	30	-	-	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =1mA	1	-	3	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =16A	-	-	6.0	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±16V; V _{DS} = 0V	-	-	±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =24V; V _{GS} = 0V	-	-	500	uA
V _{SD}	Diode forward voltage	I _{SD} =3.5A, V _{GS} = 0 V	-	-	0.7	V

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