

N-Channel MOSFET Transistor

FEATURES

- Drain Current $-I_D = 75A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = 55V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)} = 4.7m\Omega(\text{Max}) @ V_{GS} = 10V$

APPLICATIONS

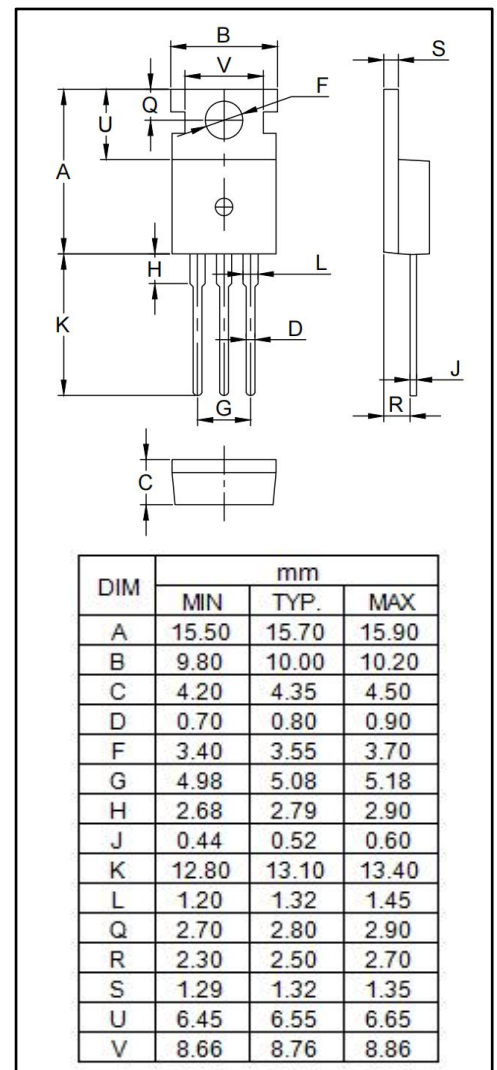
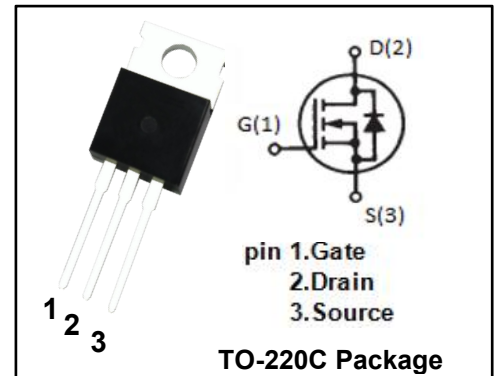
- Motor Drive, DC-DC Converter, Power Switch and Solenoid Drive.

Absolute Maximum Ratings($T_C = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	55	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	75	A
I_{DM}	Drain Current-Single Pulse	700	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	330	W
T_J	Max. Operating Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.45	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0V, I _D = 0.25mA	55	-	-	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 55V, V _{GS} = 0V	-	-	20	uA
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V, V _{DS} = 0V	-	-	±200	nA
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} , I _D = 0.25mA	2.0	-	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V, I _D = 75A	-	-	4.7	mΩ
V _{SD}	Diode Forward Voltage	I _{SD} = 75A, V _{GS} = 0V	-	-	1.3	V

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