

isc N-Channel MOSFET Transistor
STP3NB60
FEATURES

- Drain Current $-I_D = 3.3A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance;
 $-R_{DS(on)} = 3.6\Omega(\text{Max}) @ V_{GS} = 10V$

DESCRIPTION

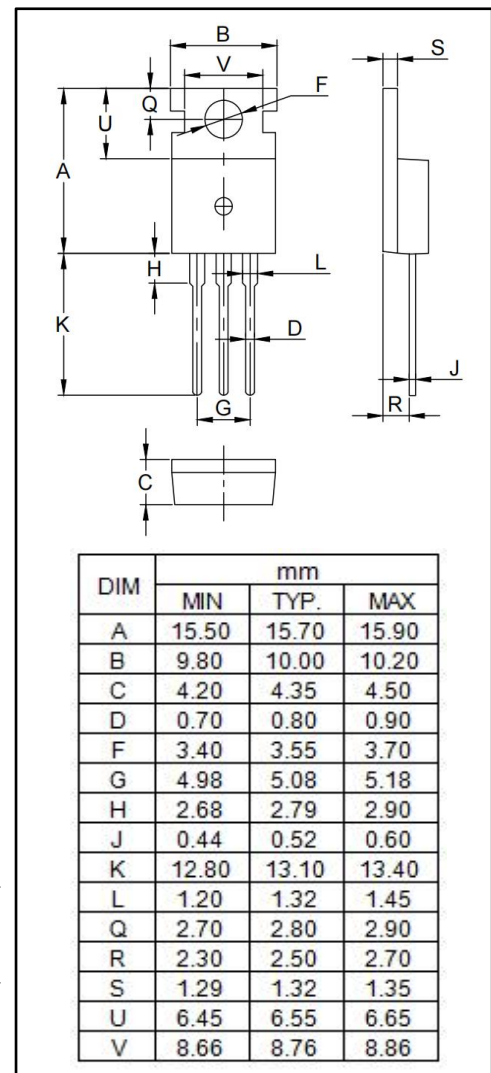
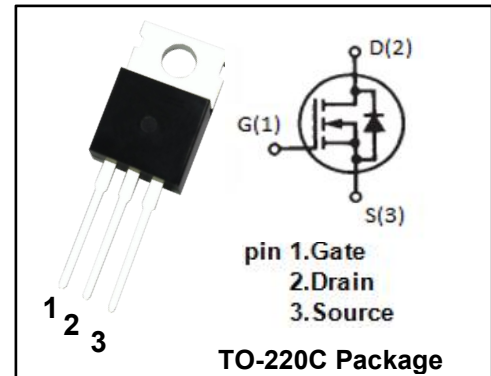
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	3.3	A
I_{DM}	Drain Current-Single Pulse	13.2	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	80	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	1.56	$^\circ C/W$



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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} = 0V; I _D = 0.25mA	600	--	--	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =600V; V _{GS} = 0V	--	--	1.0	μ A
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0V	--	--	± 100	nA
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 250 μ A	3.0	--	5.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 1.6A	--	--	3.6	Ω
V _{SD}	Forward On-Voltage	I _S = 3.3A; V _{GS} = 0V	--	--	1.6	V

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