

isc P-Channel MOSFET Transistor

TJ20A10M3

FEATURES

- Drain Current $-I_D = -20A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = -100V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)} = 90m\Omega(\text{Max}) @ V_{GS} = -10V$

DESCRIPTION

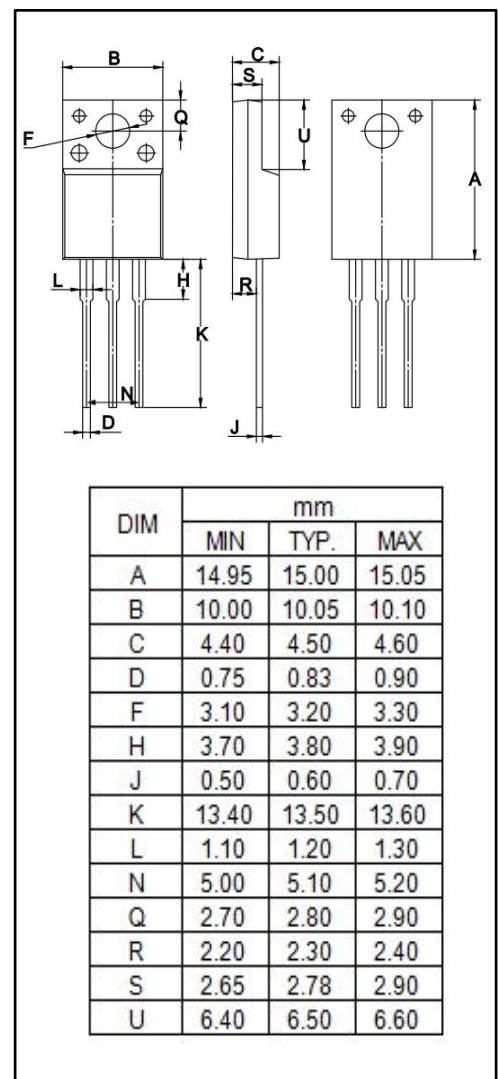
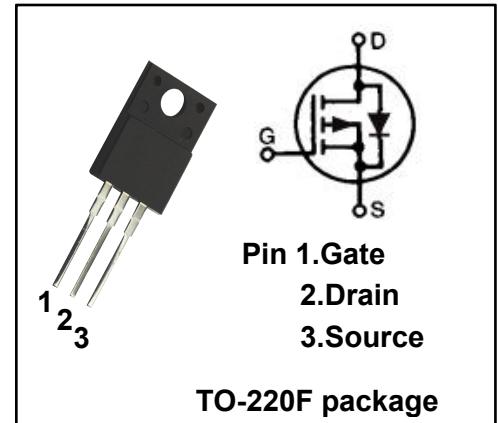
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-100	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	-20	A
I_{DM}	Drain Current-Single Pulse	-40	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	35	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	3.57	$^\circ C/W$



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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} = 0; I _D = -10mA	-100	--	--	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = -100V; V _{GS} = 0V	--	--	-10	uA
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0 V	--	--	±100	nA
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = -10V; I _D = -1mA	-2.0	--	-4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = -10V; I _D = -10A	--	--	90	mΩ
V _{SD}	Forward On-Voltage	I _S = -20A; V _{GS} = 0V	--	--	-1.4	V

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