

isc N-Channel MOSFET Transistor

2N7081

DESCRIPTION

- TO-220 ISOLATED HERMETIC PACKAGE
- LOW RDS(ON)
- SIMPLE DRIVE REQUIREMENTS

APPLICATIONS

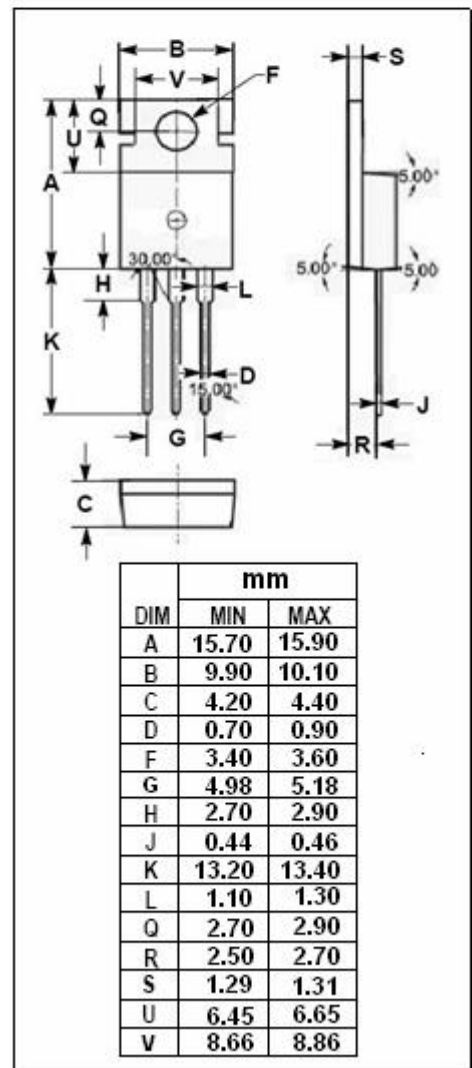
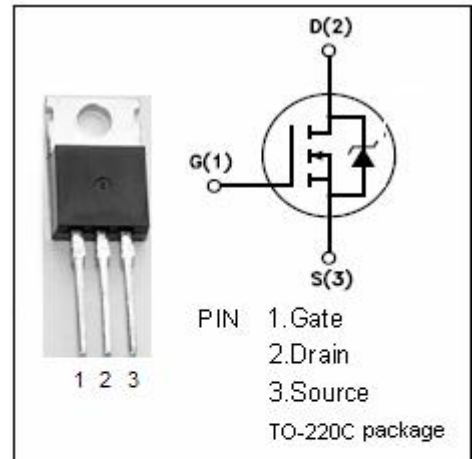
- Automotive power actuator drivers
- Motor controls
- DC-DC converters

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	100	V
V _{GS}	Gate-Source Voltage	±20	V
I _D	Drain Current-continuous@ TC=37°C	11	A
P _{tot}	Total Dissipation@TC=25°C	45	W
T _j	Max. Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	2.8	°C/W
R _{th j-a}	Thermal Resistance,Junction to Ambient	80	°C/W



isc N-Channel Mosfet Transistor**2N7081****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	100		V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2	4	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D = 7.7A		0.15	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 80V; V _{GS} = 0		25	uA
V _{SD}	Diode Forward Voltage	I _F = 11A; V _{GS} = 0		2.5	V