

N-Channel MOSFET Transistor

IRF740N

DESCRIPTION

- Drain Current $-I_D = 10A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DS} = 400V (Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.55 \Omega (Max)$
- Fast Switching Speed

APPLICATIONS

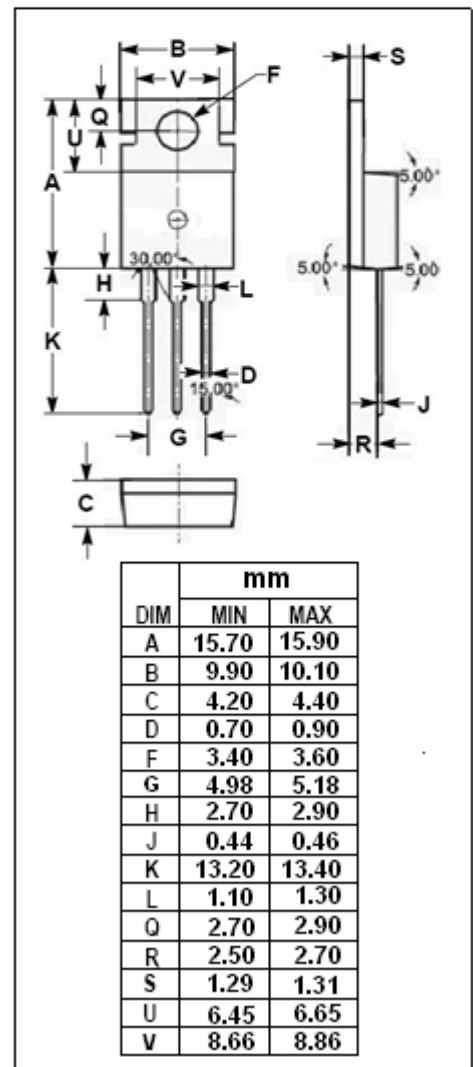
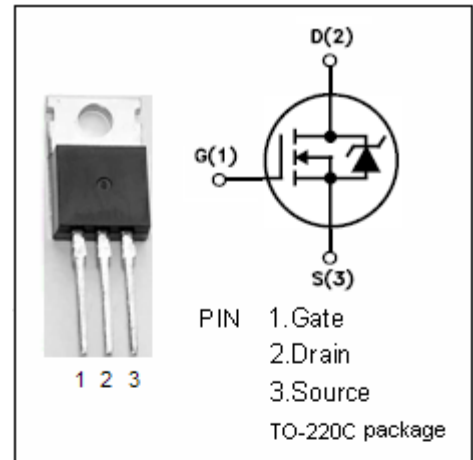
- Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS, AC and DC motor controls, relay and solenoid drivers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage ($V_{GS} = 0$)	400	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	10	A
P_{tot}	Total Dissipation@ $T_C = 25^\circ C$	125	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ C/W$



N-Channel Mosfet Transistor**IRF740N****• 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	400		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 = 5A		0.55	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0		±500	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 400V; V _{GS} = 0		250	uA
V _{SD}	Diode Forward Voltage	I _F = 10A; V _{GS} = 0		2.2	V