

N-Channel MOSFET Transistor

IRF730

DESCRIPTION

- Drain Current $-I_D=9A@ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DS}=400V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(\text{on})}=1.0\ \Omega (\text{Max})$
- Fast Switching Speed

APPLICATIONS

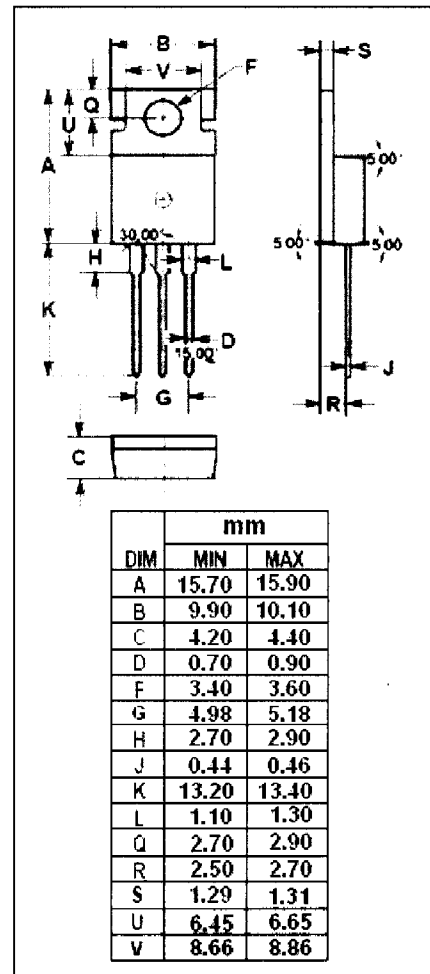
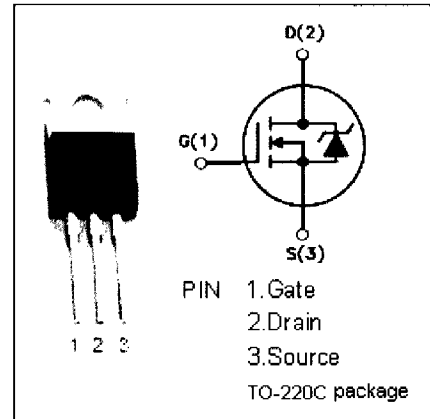
- Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS, AC and DC motor controls, relay and solenoid drivers.

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

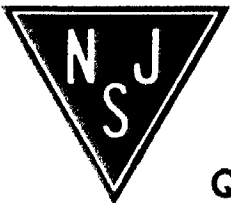
SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage ($V_{GS}=0$)	400	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^\circ C$	5.5	A
P_{tot}	Total Dissipation@ $T_C=25^\circ C$	74	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.67	$^\circ C/W$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$



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• ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=0.25\text{mA}$	400		V
$V_{GS(TH)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	2	4	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	$V_{GS}=10\text{V}; I_D=3.3\text{A}$		1.0	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=400\text{V}; V_{GS}=0$		25	μA
V_{SD}	Diode Forward Voltage	$I_F=5.5\text{A}; V_{GS}=0$		1.6	V