

N-Channel MOSFET Transistor

IRF630B

DESCRIPTION

- Drain Current $-I_D = 9A @ T_C = 25^\circ C$
- Drain Source Voltage-
 : $V_{DSS} = 200V(\text{Min})$
- Static Drain-Source On-Resistance
 : $R_{DS(on)} = 0.4 \Omega (\text{Max})$
- Fast Switching Speed

APPLICATIONS

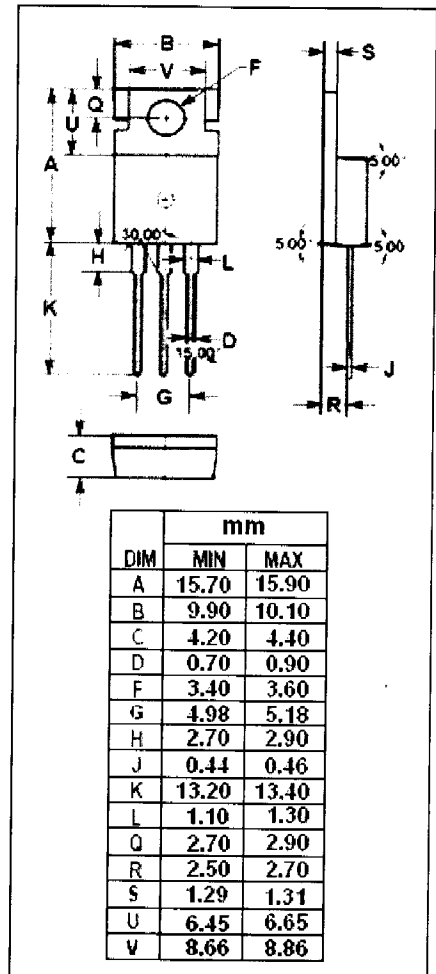
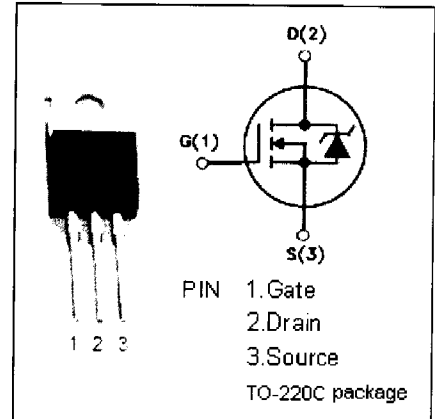
- Desinged for high efficiency switching DC/DC converters, switch mode power supplies, DC-AC converters for unin-terrupted power supply and motor control applications.

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

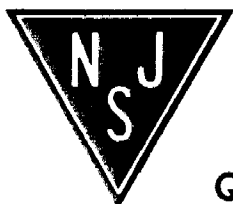
SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	200	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	9	A
P_D	Power Dissipation@ $T_C = 25^\circ C$	72	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.74	$^\circ C/W$
$R_{th j-a}$	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	$V_{GS}= 0; I_D= 0.25\text{mA}$	200		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	$V_{GS}= 10\text{V}; I_D= 4.5\text{A}$		0.4	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}= 0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}= 200\text{V}; V_{GS}= 0$		10	μA
V_{SD}	Diode Forward Voltage	$I_F= 9\text{A}; V_{GS}= 0$		1.5	V