

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

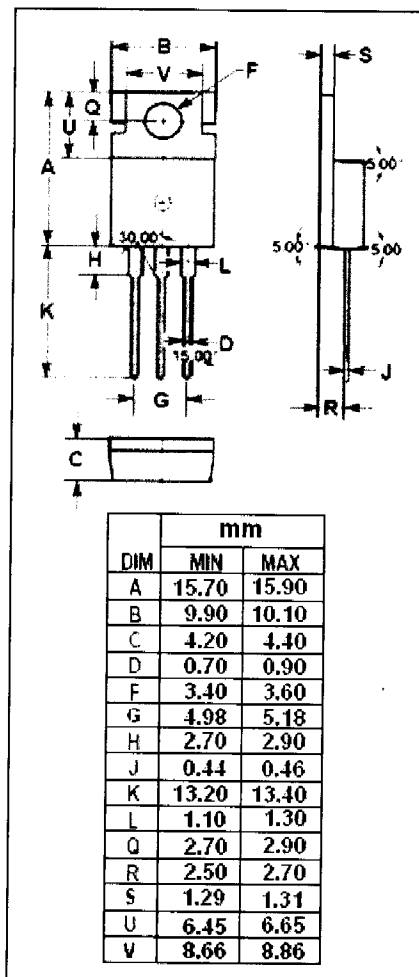
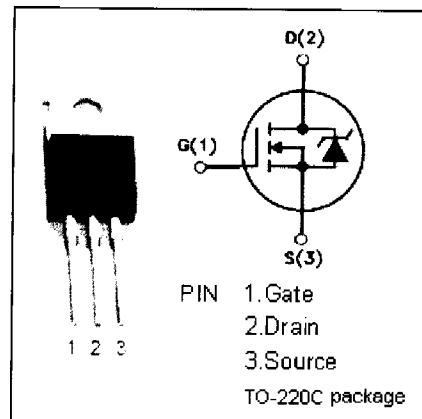
- Desinged for high efficiency switching DC/DC converters, switch mode power supplies, DC-AC converters for unin-
interrupted power supply and motor control applications.

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

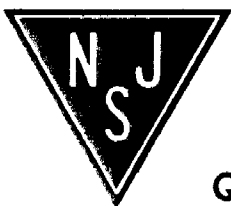
SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	200	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	9	A
P_D	Power Dissipation@ $T_C = 25^\circ C$	72	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150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

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°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	200		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 = 4.5A		0.4	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0		± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 200V; V _{GS} = 0		10	μA
V _{SD}	Diode Forward Voltage	I _F = 9A; V _{GS} = 0		1.5	V