

isc N-Channel MOSFET Transistor

IRF636

DESCRIPTION

- Drain Current $-I_D=8.1A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 275V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.45 \Omega (\text{Max})$
- Nanosecond Switching Speed
- High Input Impedance

APPLICATIONS

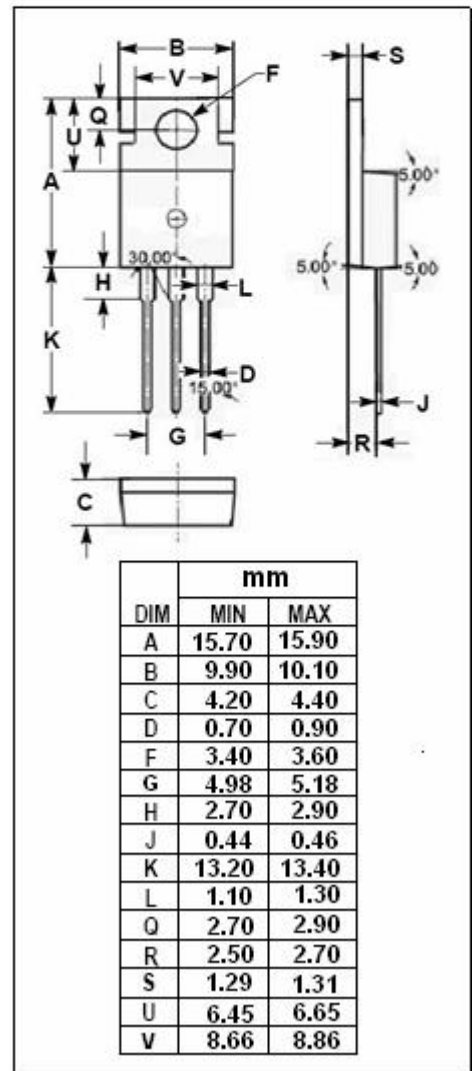
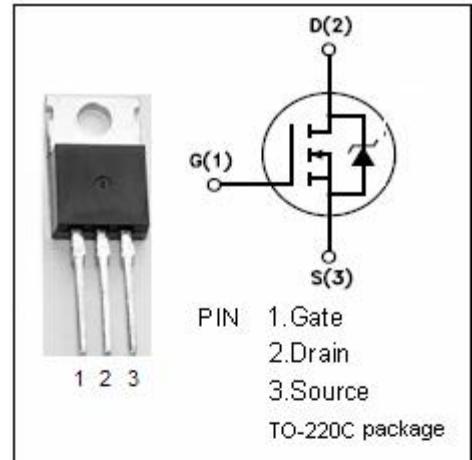
- High current , high speed switching
- Switch mode power supplies
- DC-DC converters for telecom, industrial, and lighting equipment ideal for monitor's B+ function

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	275	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^\circ C$	8.1	A
P_{tot}	Total Dissipation@ $T_C=25^\circ C$	75	W
T_j	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.67	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	80	$^\circ C/W$



isc N-Channel Mosfet Transistor**IRF636****• 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	275		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 = 4.1A		0.45	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0		±500	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 275V; V _{GS} = 0		250	uA
V _{SD}	Diode Forward Voltage	I _F = 8.1A; V _{GS} = 0		2.0	V