

isc P-Channel MOSFET Transistor

IRFP9530

FEATURES

- Drain Current $I_D = -12A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = -100V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.3 \Omega (\text{Max})$
- Fast Switching

DESCRIPTION

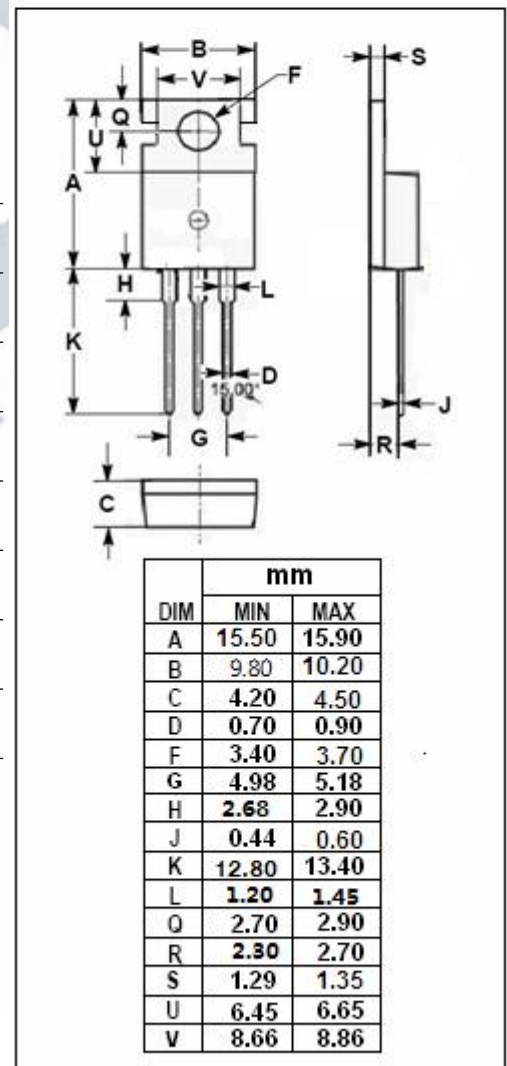
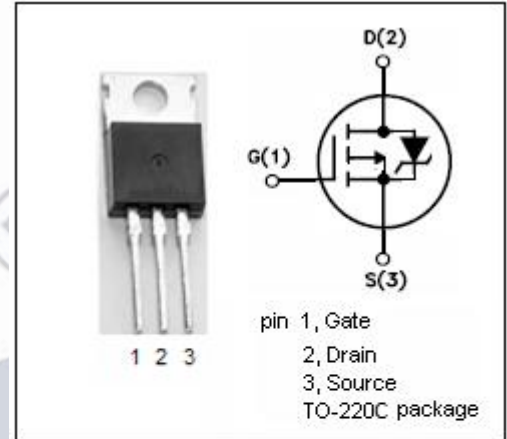
- Designed for use in switch mode power supplies and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-100	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	-12	A
I_{DM}	Drain Current-Single Pluse	-48	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	76	W
T_J	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	0.7	$^\circ C/W$
$R_{th(j-a)}$	Thermal Resistance, Junction to Ambient	30	$^\circ C/W$



isc P-Channel MOSFET Transistor**IRFP9530****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=-0.25\text{mA}$	-100		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-Resistance	$V_{GS}=-10\text{V}; I_D=-6.5\text{A}$		0.3	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$		± 500	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=-100\text{V}; V_{GS}=0$		-250	μA
V_{SD}	Forward On-Voltage	$I_S=-12\text{A}; V_{GS}=0$		-6.3	V