

isc P-Channel MOSFET Transistor
IRF9150
• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 0.15\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

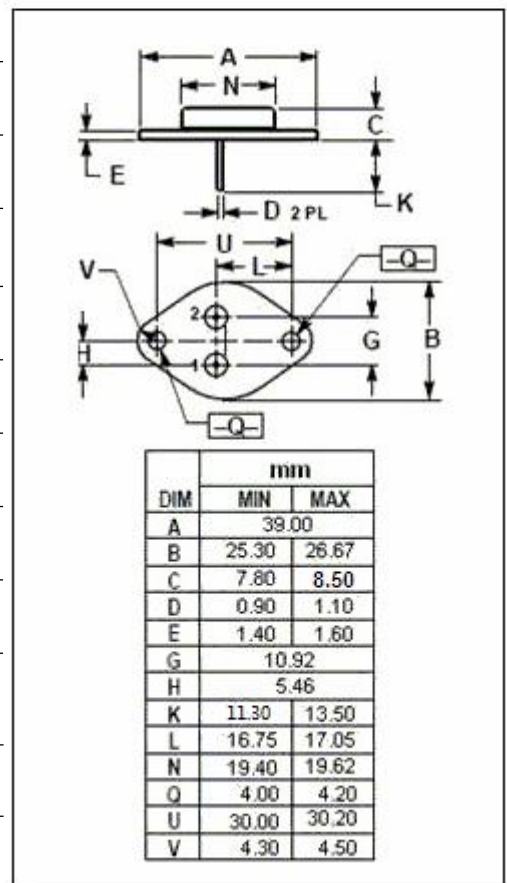
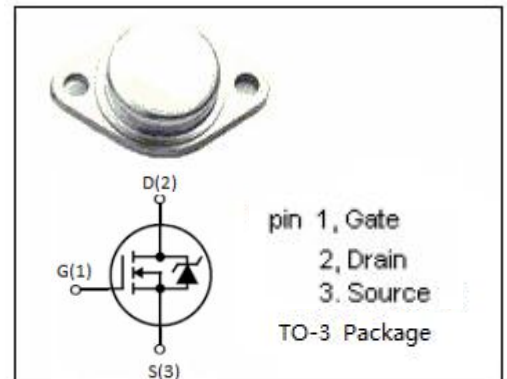
• Be designed for applications such as switching regulators, switching converters, motor drivers, relay drivers, and drivers for high power bipolar switching transistors requiring high speed and low gate drive power.

• ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

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

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	0.83	$^\circ\text{C/W}$



isc P-Channel MOSFET Transistor**IRF9150****ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = -250 μ A	-100			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D = -250 μ A	-1.5		-3	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = -10V; I _D = -10A			0.15	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = -100V; V _{GS} = 0V			-25	μ A
V _{SD}	Diode forward voltage	I _S = -25A; V _{GS} = 0V			-1.5	V

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