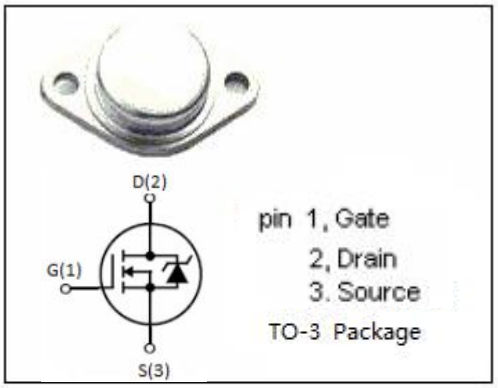
isc P-Channel MOSFET Transistor IRF9150

• FEATURES

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

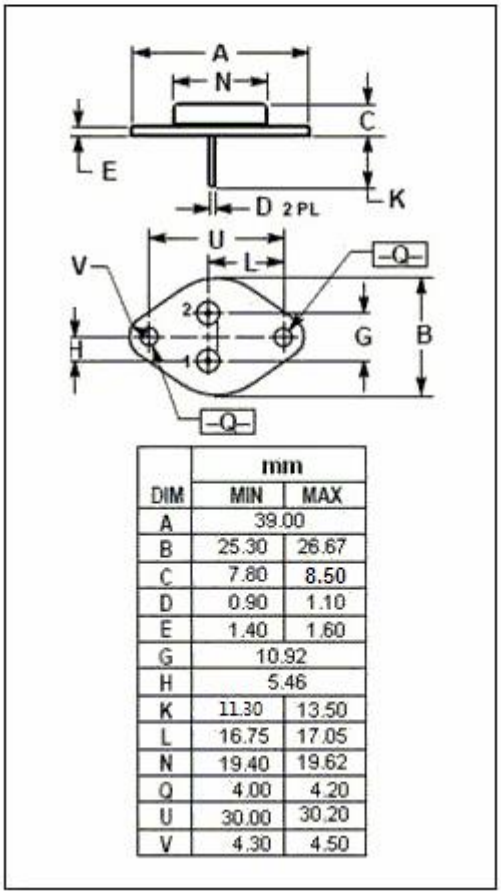


• DESCRIPTION

• Be designed for applications such as switching regulators, switching convertors, 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℃)

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	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	0.83	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= -250 μA	-100			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D= -250 μA	-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	μA
V_{SD}	Diode forward voltage	Is= -25A; V_{GS} = 0V			-1.5	V