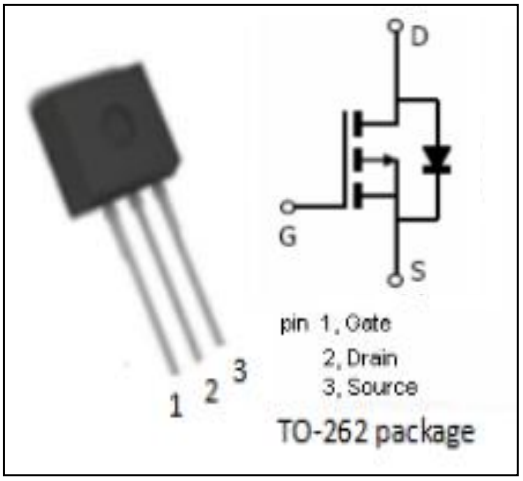
isc P-Channel MOSFET Transistor IRF9530NL



·FEATURES

- Static drain-source on-resistance:
  $R_{DS(on)} \leqslant 200m\Omega$ (@V_{GS}= -10V; I_D= -8.4A)
- Advanced trench process technology
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

- Fast switching application.

• 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	-14	A
P_D	Total Dissipation @T_C=25℃	79	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	1.9	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	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	-2	-4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= -10V; I_D= -8.4A		200	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V; V_{DS}= 0V		±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= -100V; V_{GS}= 0V		-25	μA
V_{SD}	Diode forward voltage	I_S= -8.4A, V_{GS} = 0V		-1.6	V