

isc P-Channel MOSFET Transistor

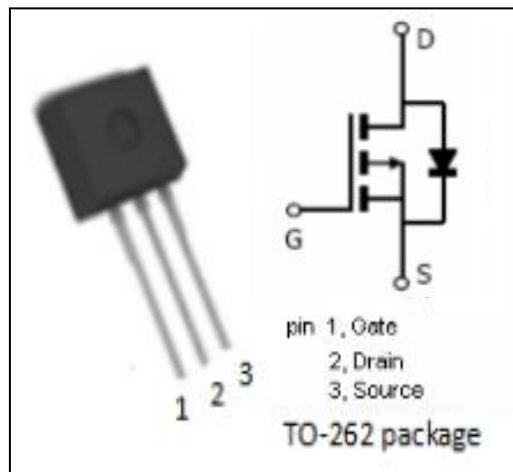
IRF9Z34NL

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 100\text{m}\Omega$ (@ $V_{GS} = -10\text{V}$; $I_D = -10\text{A}$)
- 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($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	-55	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	-19	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	68	W
T_j	Max. Operating Junction Temperature	-55~175	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~175	$^\circ\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	2.2	$^\circ\text{C/W}$

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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V$; $I_D = -250\ \mu A$	-55		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D = -250\ \mu A$	-2	-4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS} = -10V$; $I_D = -10A$		100	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS} = \pm 20V$; $V_{DS} = 0V$		± 100	nA
I_{DSS}	Drain-Source Leakage Current	$V_{DS} = -55V$; $V_{GS} = 0V$		-25	μA
V_{SD}	Diode forward voltage	$I_S = -10A$, $V_{GS} = 0V$		-1.6	V

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