

Isc N-Channel MOSFET Transistor

IRL540NL

• FEATURES

- With To-262 package
- · Low input capacitance and gate charge
- · Low gate input resistance
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

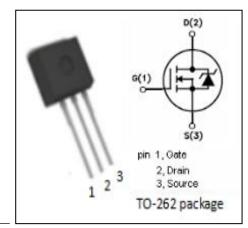


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	100	V
V_{GSS}	Gate-Source Voltage	±16	V
I _D	Drain Current-ContinuousTc=25℃ Tc=100℃	36 26	А
I _{DM}	Drain Current-Single Pulsed	120	А
P _D	Total Dissipation @T _C =25°C	140	W
T _{ch}	Max. Operating Junction Temperature	175	$^{\circ}$
T _{stg}	Storage Temperature	-55~175	${\mathbb C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.1	°C/W



mm DIM MIN MAX A 4.37 4.77 A1 1.22 1.42 A2 2.47 2.87 b 0.70 0.97 b2 1.17 1.42 c 0.28 0.53 D 23.20 24.02 D1 8.38 8.90 D2 6.00 - E 9.90 10.39 E4 7.30 - e 2.54BSC G 1.25 1.50 H2 - 1.31 L 13.34 14.10		L L3	A		
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L3 0.95 1.15	İ		75 mire 55/20	CX 2035	1



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	100			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.25mA	1.0		2.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =18A			44	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±16V;V _{DS} =0V			±0.1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} =100V; V _{GS} = 0V;Tj=25°C V _{DS} =80V; V _{GS} = 0V;Tj=125°C			25 250	μА
V _{SDF}	Diode forward voltage	I _{SD} =18A, V _{GS} = 0 V			1.3	V



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