

INCHANGE SEMICONDUCTOR

Isc N-Channel MOSFET Transistor

IRF2807L

FEATURES With To-262 package D(2) · 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 pin 1, Gate APPLICATIONS 2, Drain 3 · Switching applications 3, Source 2 TO-262 package ABSOLUTE MAXIMUM RATINGS(Ta=25°C) SYMBOL VALUE UNIT PARAMETER Drain-Source Voltage 75 V V_{DSS} VGSS Gate-Source Voltage ± 20 V Drain Current-ContinuousTc=25℃ 82 I_{D} А Tc=100°C 58 mm Drain Current-Single Pulsed 280 **I**DM А MIN MAX DIM 4.37 4.77 A 1.42 A1 22 Total Dissipation @T_c=25℃ P_{D} 230 W A2 2.47 2.87 0.97 0.70 ь Ъ2 1.17 1.42 Tch Max. Operating Junction Temperature 175 °C 0.53 0.28 24.02 23.20 D D1 8.90 8.38 D2 6.00 Storage Temperature -55~175 °C Tstg Ε 9.90 10.39 E4 7.30 2.54BSC e 1.25 1.50 G THERMAL CHARACTERISTICS H2 1.31 13.34 14.10 L L1 3.30 4.06 SYMBOL PARAMETER MAX UNIT L3 0.95 1.15

0.65

1

°C/W

Channel-to-case thermal resistance

Rth(ch-c)



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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	75			V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.25mA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =43A			13	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =75V; V _{GS} = 0V;Tj=25℃ V _{DS} =60V; V _{GS} = 0V;Tj=125℃			20 250	μA
V _{SDF}	Diode forward voltage	I_{SD} =43A, V_{GS} = 0 Vs			1.2	V

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