

# **Isc N-Channel MOSFET Transistor**

### IRFSL23N15D

D(2)

5(3

pin 1, Oate

3

2

2, Drain

3, Source

#### 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

• ABSOL	UTE MAXIMUM RATINGS(Ta=25°C	TO-262 package			
SYMBOL	PARAMETER	VALUE	UNIT		
V <sub>DSS</sub>	Drain-Source Voltage	150	v		
V <sub>GSS</sub>	Gate-Source Voltage	±30	v		
ID	Drain Current-ContinuousTc=25℃ Tc=100℃	23 17	A		
I <sub>DM</sub>	Drain Current-Single Pulsed	92	A		
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25°C	136	w	- DIM MIN MAX A 4.37 4.77 A1 1.22 1.42 A2 2.47 2.87	
T <sub>ch</sub>	Max. Operating Junction Temperature	175	°C	b 0.70 0.97 b2 1.17 1.42 c 0.28 0.53 D 23.20 24.02	
T <sub>stg</sub>	Storage Temperature	-55~175	°C	D1 8.38 8.90   D2 6.00    E 9.90 10.39	
• THERM		- <u>E4</u> 7.30 - e 2.54BSC G 1.25 1.50 H2 - 1.31			
SYMBOL	PARAMETER	МАХ	UNIT	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

1.1

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°C/W

Channel-to-case thermal resistance

Rth(ch-c)



## Isc N-Channel MOSFET Transistor

### IRFSL23N15D

### ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> =0.25mA	150			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =0.25mA	3.0		5.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =14A			90	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> =0V			±0.1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =150V; V <sub>GS</sub> = 0V;Tj=25℃ V <sub>DS</sub> =120V; V <sub>GS</sub> = 0V;Tj=150℃			25 250	μA
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =14A, V <sub>GS</sub> = 0 V			1.3	V

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