

# **Isc N-Channel MOSFET Transistor**

# IRFSL33N15D

### • FEATURES

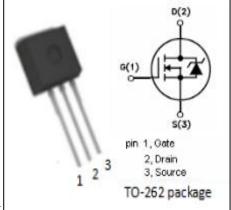
- With To-262 package
- · Low input capacitance and gate charge
- Low gate input resistanceV
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

### APPLICATIONS

Switching applications





SYMBOL	PARAMETER	VALUE	UNIT	
$V_{DSS}$	Drain-Source Voltage	150	V	
$V_{GSS}$	Gate-Source Voltage	±30	V	
l <sub>D</sub>	Drain Current-ContinuousTc=25℃ Tc=100℃	33 24	А	
I <sub>DM</sub>	Drain Current-Single Pulsed	130	Α	
$P_D$	Total Dissipation @T <sub>C</sub> =25°C	170	W	
$T_ch$	Max. Operating Junction Temperature	175	°C	
T <sub>stg</sub>	Storage Temperature	-55~175	${\mathbb C}$	

G 1	10	A		
		n	ı.	
l D	IM	MIN	MAX	
	A	4.37	4.77	
	A1	1.22	1.42	
	A2	2.47	2.87	
	Ъ	0.70	0.97	
	Ь2	1.17	1.42	1
	С	0.28	0.53	]
	D	23.20	24.02	
	D1	8.38	8.90	
1	D2	6.00	-8	1
	Е	9.90	10.39	]
	E4	7.30		1
3	е	2.54BSC		
	G	1.25	1.50	1
	H2	1 Kee	1.31	1
	L	13.34	14.10	1
	L1 L3	3.30 0.95	4.06 1.15	

## • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	0.9	°C/W	



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#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	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(th)</sub>	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> =20A			56	mΩ	
I <sub>GSS</sub>	Gate-Source Leakage Current	$V_{GS}$ = $\pm 30V; V_{DS}$ = $0V$			±0.1	μА	
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =150V; V <sub>GS</sub> = 0V;Tj=25°C V <sub>DS</sub> =120V; V <sub>GS</sub> = 0V;Tj=150°C			25 250	μА	
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =20A, V <sub>GS</sub> = 0 V			1.3	V	

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