

### **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

## IRL2203N, IIRL2203N

### • FEATURES

- Static drain-source on-resistance: RDs(on) ≤7.0mΩ
- Enhancement mode
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRITION

· reliable device for use in a wide variety of applications

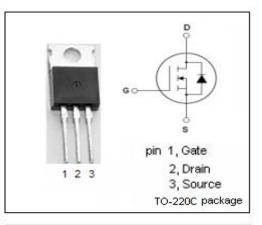
SYMBOL	PARAMETER	VALUE	UNIT			
VDSS	Drain-Source Voltage	30	V			
V <sub>GS</sub>	Gate-Source Voltage	±16	V			
Ι <sub>D</sub>	Drain Current-Continuous	116	А			
I <sub>DM</sub>	Drain Current-Single Pulsed	400	А			
PD	Total Dissipation @T <sub>c</sub> =25°C	180	W			
Tj	Max. Operating Junction Temperature	175	°C			
T <sub>stg</sub>	Storage Temperature	-55~175	°C			

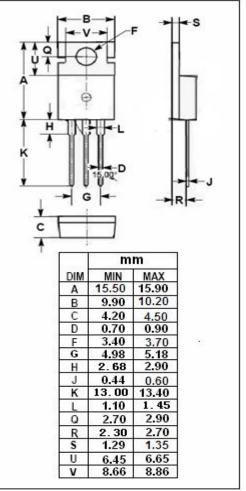
#### • ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

# THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.85	°C <b>/W</b>
Rth(ch-a)	ch-a) Channel-to-ambient thermal resistance		°C/W

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### isc website: www.iscsemi.cn



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### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; ID = 250μA	30			v
$V_{GS(th)}$	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =250 μ A	1.0			V
$R_{\text{DS(on)}}$	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =60A			7.0	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =± 16V			±0.1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =30V; V <sub>GS</sub> = 0V			25	μA
Vsd	Diode forward voltage	Is =60A, V <sub>GS</sub> = 0 V			1.2	V

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