

### INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

# IRFU3411

### • FEATURES

- With TO-251(IPAK) packaging
- High speed switching
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

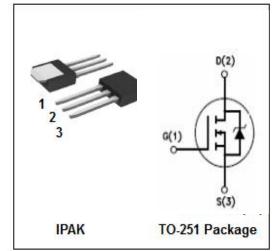
- Power supply
- DC-DC converters
- Motor control
- Switching applications

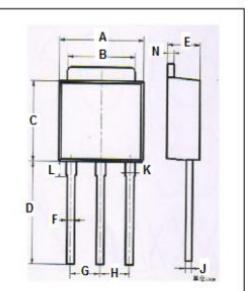
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V <sub>DSS</sub>	Drain-Source Voltage	100	V			
V <sub>GSS</sub>	Gate-Source Voltage	±20	∧v			
ID	Drain Current-Continuous	32	A			
I <sub>DM</sub>	Drain Current-Single Pulsed	110	А			
PD	Total Dissipation	130	W			
Tj	Operating Junction Temperature	-55~175	°C			
T <sub>stg</sub>	Storage Temperature	-55~175	°C			

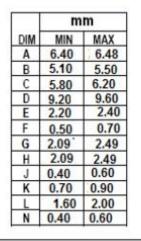
#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	1.2	°C/W	
Rth(ch-a)	th(ch-a) Channel-to-ambient thermal resistance		°C/W	

1







### isc website: www.iscsemi.cn

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### **ELECTRICAL CHARACTERISTICS**

 $T_{\text{C}}\text{=}25^{\circ}\!\!\!\!\mathrm{C}$  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	100			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =0.25mA	2.0		4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =16A		36	44	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0V			±0.1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 100V; V <sub>GS</sub> = 0V;Tj=25℃ V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0V;Tj=150℃			20 250	μA
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =16A, V <sub>GS</sub> =0V			1.2	V

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2