

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

IRLU3410

• 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

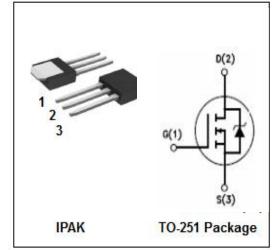
- Power supply
- DC-DC converters
- Motor control
- Switching applications

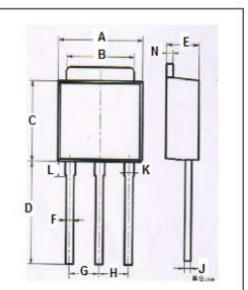
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V _{DSS}	Drain-Source Voltage	100	V			
V _{GSS}	Gate-Source Voltage	±16	∧v			
ID	Drain Current-Continuous	17	A			
I _{DM}	Drain Current-Single Pulsed	60	A			
PD	Total Dissipation	79	W			
Tj	Operating Junction Temperature	-55~175	°C			
T _{stg}	Storage Temperature	-55~175	°C			

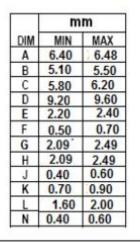
• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	1.9	°C/W	
Rth(ch-a)	Channel-to-ambient thermal resistance	50	°C/W	

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isc website: www.iscsemi.cn

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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^\circ\!\!\mathbb{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	100			v
V _{GS} (th)	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.25mA	1.0		2.0	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =10A			105	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±16V;V _{DS} =0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 100V; V _{GS} = 0V;Tj=25℃ V _{DS} = 80V; V _{GS} = 0V;Tj=150℃			20 250	μA
V _{SDF}	Diode forward voltage	I _{SD} =9A, V _{GS} =0V			1.3	V



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