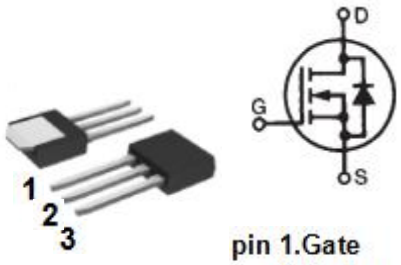
iscN-Channel MOSFET Transistor IRFU214

• **FEATURES**
• Low drain-source on-resistance:
  $R_{DS(ON)}$ ≤2.0Ω @V_{GS}=10V
• Enhancement mode:
  Vth = 2.0 to 4.0V (V_{DS} = 10 V, I_D=0.25mA)
• 100% avalanche tested
• Minimum Lot-to-Lot variations for robust device performance and reliable operation



pin 1.Gate
2.Drain
3.Source

IPAK

TO-251 package

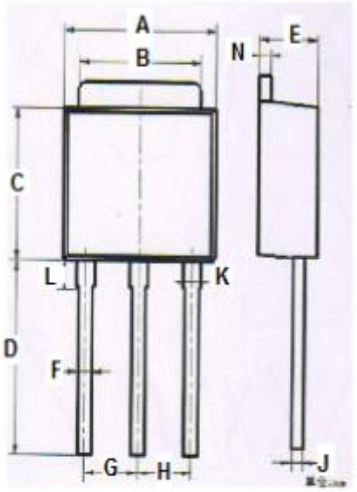
• **DESCRITION**
• Switching Voltage Regulators

• **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	250	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	2.2	A
I_{DM}	Drain Current-Single Pulsed	8.8	A
P_D	Total Dissipation @T_C=25℃	25	W
T_j	Max. Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature	-55~150	℃

• **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	5.0	℃/W



DIM	mm MIN	MAX
A	6.40	6.48
B	5.10	5.50
C	5.80	6.20
D	9.20	9.60
E	2.20	2.40
F	0.50	0.70
G	2.09	2.49
H	2.09	2.49
J	0.40	0.60
K	0.70	0.90
L	1.60	2.00
N	0.40	0.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= 0.25mA	250			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=0.25mA	2.0		4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=10V; I_D=1.3A			2.0	Ω
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0V			±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}=250V; V_{GS}= 0V V_{DS}=200V; V_{GS}= 0V;T_J=125℃			25 250	uA
V_{SDF}	Diode forward voltage	I_{DR} =2.2A, V_{GS} = 0 V			2.0	V

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