

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 (VDs = 10 V, ID=0.25mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

Switching Voltage Regulators

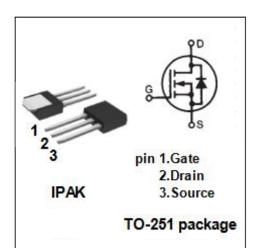
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

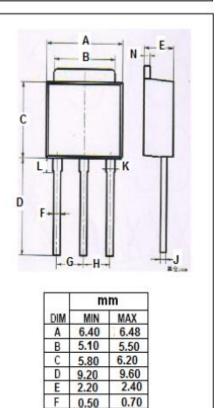
SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	250	V
V _{GS}	Gate-Source Voltage	±20	V
lo	Drain Current-Continuous	2.2	A
Ідм	Drain Current-Single Pulsed	8.8	A
P _D	Total Dissipation @T _c =25℃	25	W
Tj	Max. Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature -55~150		°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	5.0	°C/W

1





G

н

J

Ν

2.09

2.09

0.40

0.70

0.40

1.60

2.49

2.49

0.60

0.90

2.00

0.60



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	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
lgss	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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