IRFUC20



iscN-Channel MOSFET Transistor

• FEATURES

- Low drain-source on-resistance: RDS(ON) =4.4 Ω (MAX)
- Enhancement mode: Vth = 2.0 to 4.0 V (VDS = 10 V, ID=0.25 mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



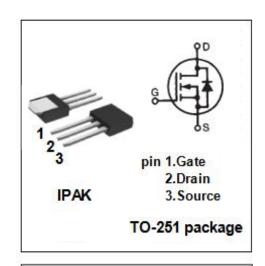
· Switching Voltage Regulators

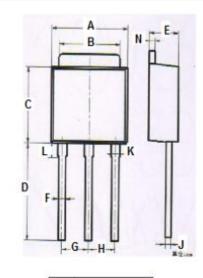
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	600	V	
V _G s	Gate-Source Voltage		V	
I _D	Drain Current-Continuous	2.0	А	
Ірм	Drain Current-Single Pulsed	8.0	А	
P _D	Total Dissipation @Tc=25°C	42	W	
Tj	Max. Operating Junction Temperature	-55~150	$^{\circ}$ C	
T _{stg}	Storage Temperature	-55~150	$^{\circ}$ C	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	3.0	°C/W	





	mm		
DIM	MIN	MAX	
Α	6.40	6.48	
В	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	
Н	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

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	600			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 =1.2A			4.4	Ω
lgss	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =600V; V _{GS} = 0V V _{DS} =480V; V _{GS} = 0V;T _J =125°C			100 500	uA
V _{SDF}	Diode forward voltage	I _{DR} =2.0A, V _{GS} = 0 V			1.6	V

NOTICE:

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