

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor IRFB

IRFB4115G, IIRFB4115G

FEATURES

- Static drain-source on-resistance: RDs(on) ≤11mΩ
- Enhancement mode
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

- High Efficiency Synchronous Rectification in SMPS
- Uninterruptible Power Supply

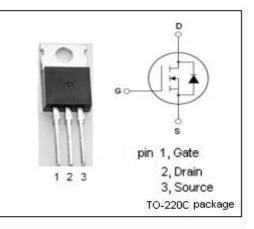
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

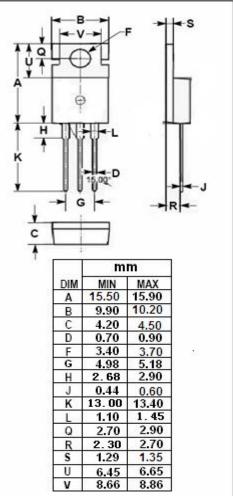
SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	150	V	
V _{GS}	Gate-Source Voltage	±20	V	
I _D	Drain Current-Continuous	104	A	
I _{DM}	Drain Current-Single Pulsed	420	А	
P _D	Total Dissipation @T _c =25°C	380	W	
Tj	Max. Operating Junction Temperature	175	°C	
T _{stg}	Storage Temperature	-55~175	°C	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.4	°C/W
Rth(ch-a)	Channel-to-ambient thermal resistance	62	°C/W

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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; ID =250 μ A	150			V
$V_{GS(th)}$	Gate Threshold Voltage	V _{DS} =V _{GS} ; ID =250 μ A	3		5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =62A			11	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =150V; V _{GS} = 0V			20	μA
V _{SD}	Diode forward voltage	Is=62A; V _{GS} = 0V			1.3	V

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