

### **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

## IRFB3207Z, IIRFB3207Z

## • FEATURES

- Static drain-source on-resistance: RDs(on) ≤4.1mΩ
- Enhancement mode
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRITION

• reliable device for use in a wide variety of applications

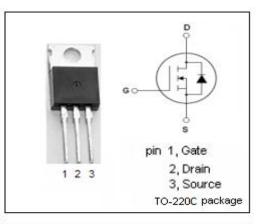
* ABSOLUTE MAXIMUM RATINGS(Ta=23 C)							
SYMBOL	. PARAMETER VALUE		UNIT				
V <sub>DSS</sub>	Drain-Source Voltage	75	V				
V <sub>GS</sub>	Gate-Source Voltage	±20	V				
ID	Drain Current-Continuous	170	А				
I <sub>DM</sub>	Drain Current-Single Pulsed	670	A				
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25℃	300	W				
Tj	Max. Operating Junction Temperature	175	°C				
T <sub>stg</sub>	Storage Temperature	-55~175	°C				

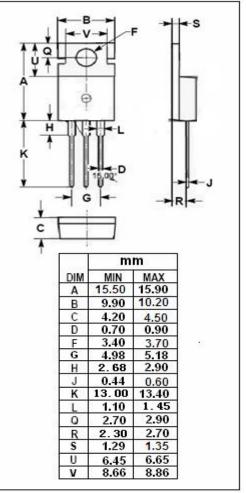
### • ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.5	°C <b>/W</b>
Rth(ch-a)	tth(ch-a) Channel-to-ambient thermal resistance		°C <b>/W</b>

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#### isc website: www.iscsemi.cn



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### **ELECTRICAL CHARACTERISTICS**

 $T_c=25^{\circ}C$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; ID =250 μ A	75			v
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; ID =150 μ A	2.0		4.0	v
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =75A			4.1	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =±20V			±0.1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =75V; V <sub>GS</sub> = 0V			20	μA
V <sub>SD</sub>	Diode forward voltage	Is=75A, V <sub>GS</sub> = 0 V			1.3	V

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