

# isc N-Channel MOSFET Transistor

# IRFB3306, IIRFB3306

#### • FEATURES

- Static drain-source on-resistance:
  R<sub>D</sub>s(on) ≤4.2mΩ
- Enhancement mode
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

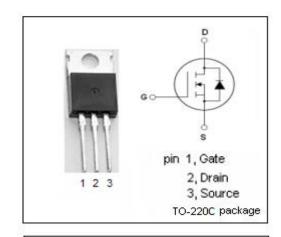
- · High efficiency synchronous rectification in SMPS
- Uninterrruptible power supply
- · High speed power switching

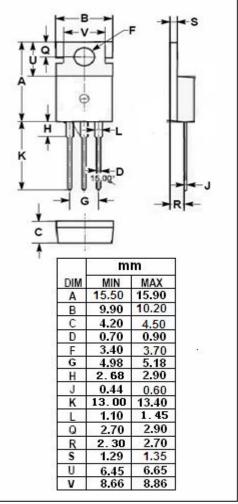
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	V	
V <sub>GS</sub>	Gate-Source Voltage	V	
I <sub>D</sub>	Drain Current-Continuous	А	
I <sub>DM</sub>	Drain Current-Single Pulsed	620	А
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	230	W
Tj	Max. Operating Junction Temperature	emperature 175	
T <sub>stg</sub>	Storage Temperature	-55~175	$^{\circ}$

## • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.65	°C/W
Rth(ch-a)	Rth(ch-a) Channel-to-ambient thermal resistance		°C/W







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## **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> =250 μ A	60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; ID =150 μ A	2		4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; ID=75A			4.2	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V			±100	nA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =60V; V <sub>GS</sub> = 0V			20	μА
V <sub>SD</sub>	Diode forward voltage	I <sub>S</sub> =75A; V <sub>GS</sub> = 0V			1.3	V

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