

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

IRLZ44N, IIRLZ44N

• FEATURES

- Static drain-source on-resistance: RDs(on) ≤22mΩ
- 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

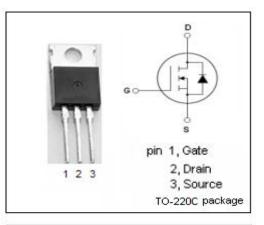
SYMBOL	PARAMETER	VALUE	UNIT				
VDSS	Drain-Source Voltage	55	V				
V _{GS}	Gate-Source Voltage	±16	V				
ID	Drain Current-Continuous	47	A				
I _{DM}	Drain Current-Single Pulsed	160	A				
PD	Total Dissipation @T _c =25°C	110	W				
Tj	Max. Operating Junction Temperature	175	°C				
T _{stg}	Storage Temperature	-55~175	°C				

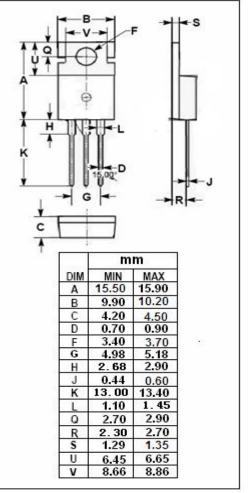
• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.4	°C /W
Rth(ch-a)	Channel-to-ambient thermal resistance	62	°C/W

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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 _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; ID =250 μ A	55			V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} =V _{GS} ; ID =250 μ A	1.0		2.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =25A			22	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±16V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =55V; V _{GS} = 0V			25	μA
V _{SD}	Diode forward voltage	Is=25A, V _{GS} = 0 V			1.3	V

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