

isc N-Channel MOSFET Transistor

VN88AF

• FEATURES

- With TO-220 packaging
- Low switching loss
- Ultra low gate charge
- Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operationz

• APPLICATIONS

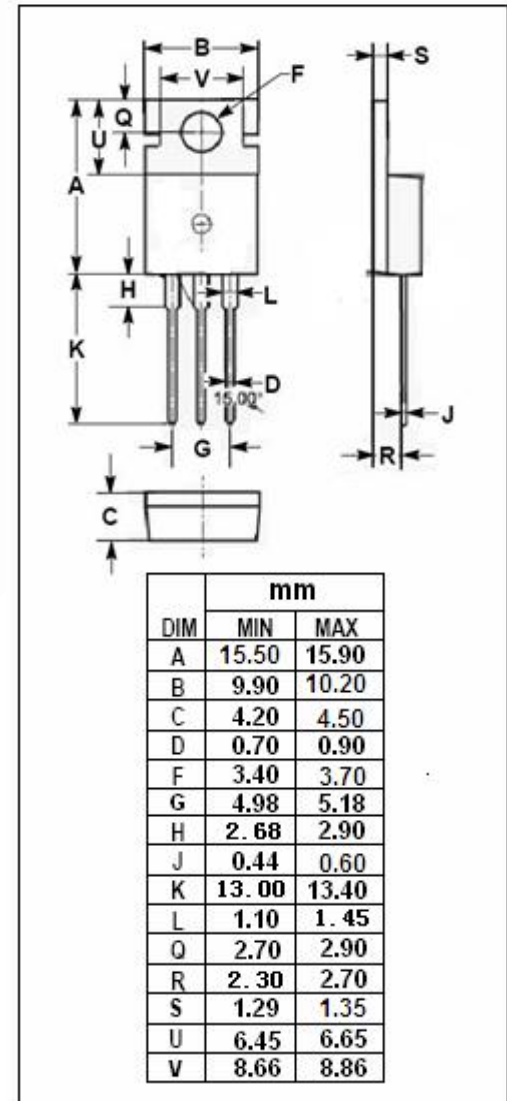
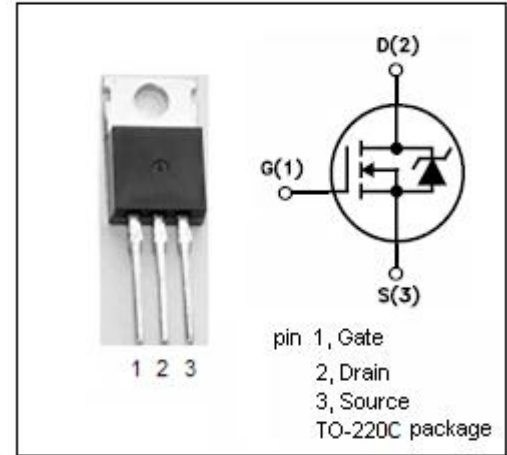
- Switching applications
- AC-DC converters
- LED lighting
- Uninterruptible power supply

• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	80	V
V _{GSS}	Gate-Source Voltage	±30	V
I _D	Drain Current-Continuous@T _c =25°C T _c =100°C	1.29 0.81	A
I _{DM}	Drain Current-Single Pulsed	3	A
P _D	Total Dissipation	15	W
T _j	Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th(ch-c)}	Channel-to-case thermal resistance	0.59	°C/W
R _{th(ch-a)}	Channel-to-ambient thermal resistance	62.5	°C/W



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 1mA	80			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =±30V; I _D =1mA	0.8		2.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =1A			4	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±15V; V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 80V; V _{GS} = 0V; T _j =25°C V _{DS} = 64V; V _{GS} = 0V; T _j =125°C			10 500	μA
V _{SDF}	Diode forward voltage	I _{SD} =0.86A, V _{GS} = 0 V			0.9	V