

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

AOTF2916L

• FEATURES

- Drain-source on-resistance: RDs(on) ≤ 34mΩ@10V
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

High fast switching Power Supply

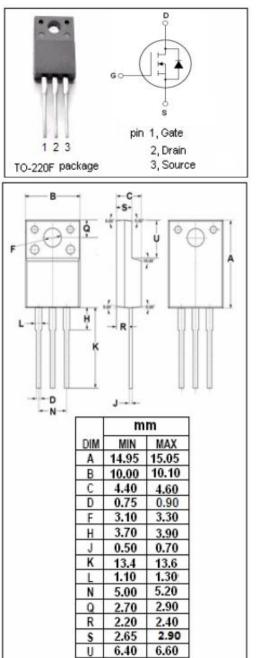
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT			
V _{DSS}	Drain-Source Voltage	100	v			
V _{GS}	Gate-Source Voltage ±20		V			
Ι _D	Drain Current-Continuous 1		A			
I _{DM}	Drain Current-Single Pulsed 50		A			
P _D	Total Dissipation @T _C =25°C	23.5	W			
Tj	Max. Operating Junction Temperature	175	°C			
T _{stg}	Storage Temperature	-55~175	°C			

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	6.38	°C/W

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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^{\circ}\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 250 μ A	100			V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 250 μ A	1.6		2.7	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =10A			34	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =100V; V _{GS} = 0V			1	μA
V _{SD}	Diode forward on voltage	I _{SD} =10A, V _{GS} = 0 V			1	V

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