

isc N-Channel MOSFET Transistor

AOT5N100

FEATURES

- Drain Current $-I_D = 4A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 1000V (Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 4.2 \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

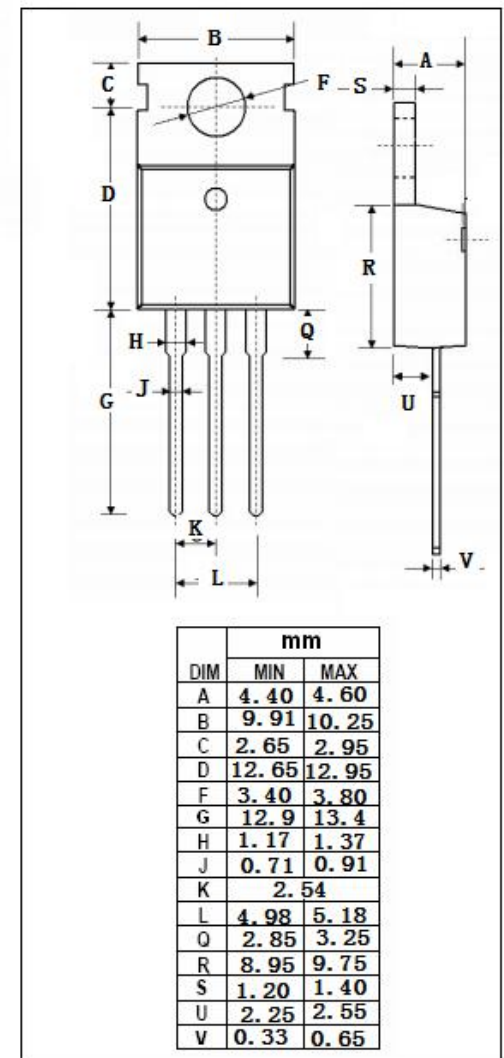
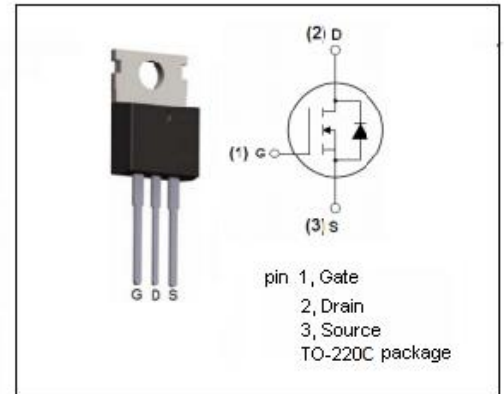
- Switching application

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	1000	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	4	A
I_{DM}	Drain Current-Single Pluse	16	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	195	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.64	$^\circ C/W$



isc N-Channel MOSFET Transistor**AOT5N100****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 250 μA	1000			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 250 μA	3.3		4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 2.5A		3.5	4.2	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 1000V; V _{GS} = 0 V _{DS} = 800V; V _{GS} = 0; T _J = 125°C			1 10	μA
V _{SD}	Forward On-Voltage	I _S = 1A; V _{GS} =0			1	V

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