

isc N-Channel MOSFET Transistor

AOT7S65L

FEATURES

- Drain Current $-I_D = 7.0A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 650V (Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.65 \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

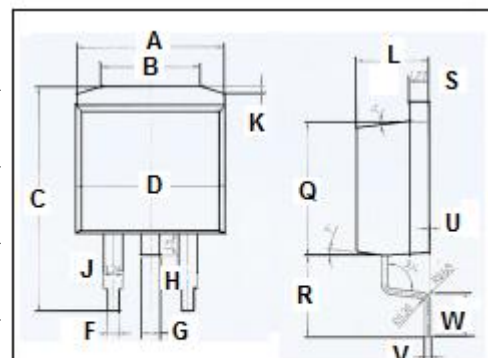
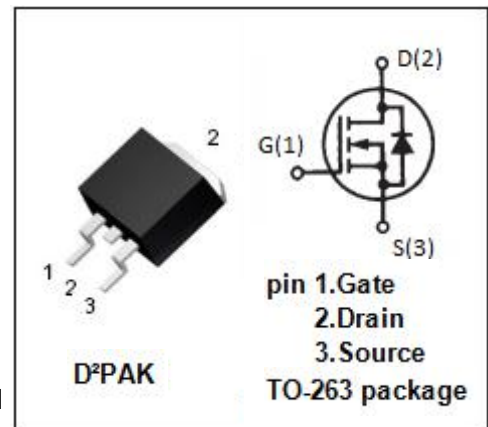
- Designed for use in switch mode power supplies and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	650	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	7.0	A
I_{DM}	Drain Current-Single Pluse	30	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	104	W
T_J	Max. Operating Junction Temperature	-50~150	$^\circ C$
T_{stg}	Storage Temperature	-50~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.2	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

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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 = 0.25mA	650			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2.6		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =3.5A V _{GS} = 10V; I _D =3.5A@T _J =150°C			0.65 1.64	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =650V; V _{GS} = 0 V _{DS} =520V; V _{GS} = 0@T _J =150°C		10	1	μA
V _{SD}	Forward On-Voltage	I _S = 3.5A; V _{GS} = 0		0.82		V

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