

isc N-Channel MOSFET Transistor

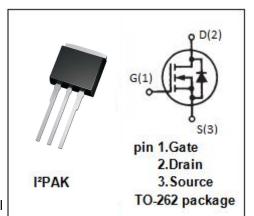
AOW12N60

FEATURES

- Drain Current –I_D=12A@ T_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=600V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)} = 0.55 \Omega$ (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(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	600	V
V _{GS}	Gate-Source Voltage-Continuous	±30	V
ID	Drain Current-Continuous	12	A
I _{DM}	Drain Current-Single Pluse	48	A
P _D	Total Dissipation @T _c =25℃	278	W
TJ	Max. Operating Junction Temperature -55~150		°C
T _{stg}	Storage Temperature	-55~150	°C

C D K Q U J H H R W

DIM	m	m
	MIN	MAX
A		0
В	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
Ġ	1.26	1.28
Н	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
0	8.69	8.71
R	5.28	5.30
R S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
R _{th j-c}	Thermal Resistance, Junction to Case	0.45	°C/W	

isc website: <u>www.iscsemi.com</u>

¹ *isc & iscsemi* is registered trademark



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	600		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 5V; I _D = 0.25mA	3	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 6A		0.55	Ω
lgss	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V_{DS} = 600V; V_{GS} = 0 V_{DS} = 480V; 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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