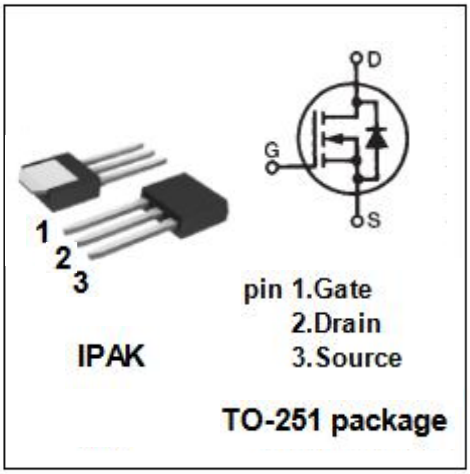
isc N-Channel MOSFET Transistor AOI418

• FEATURES

- Drain Current –I_D= 36A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 30V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 7.5mΩ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• DESCRITION

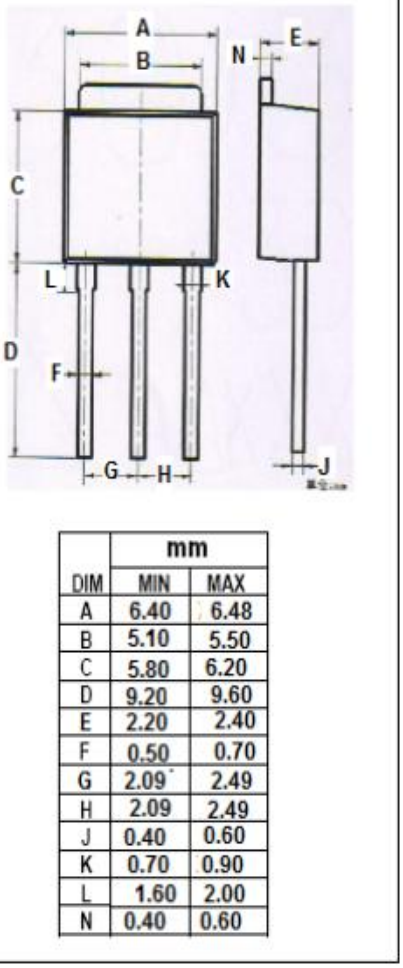
- Be suitable for synchronous rectification for server and general purpose applications

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	30	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	36	A
I_{DM}	Drain Current-Single Pulsed	125	A
P_D	Total Dissipation @T_C=25℃	50	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	3.0	℃/W



DIM	mm MIN	MAX
A	6.40	6.48
B	5.10	5.50
C	5.80	6.20
D	9.20	9.60
E	2.20	2.40
F	0.50	0.70
G	2.09	2.49
H	2.09	2.49
J	0.40	0.60
K	0.70	0.90
L	1.60	2.00
N	0.40	0.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D = 250 μ A	30		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D = 250 μ A	1.5	2.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 20A V_{GS}= 10V; I_D= 20A;T_J= 125℃		7.5 11.5	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±25V;V_{DS}= 0V		±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 30V; V_{GS}= 0V V_{DS}= 30V; V_{GS}= 0V;T_J= 55℃		1 5	μ A
V_{SD}	Diode forward voltage	Is= 1A; V_{GS} = 0V		1	V