

isc P-Channel MOSFET Transistor
AOI403
FEATURES

- Drain Current $-I_D = -70A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = -30V$ (Min)
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 8.5m\Omega$ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

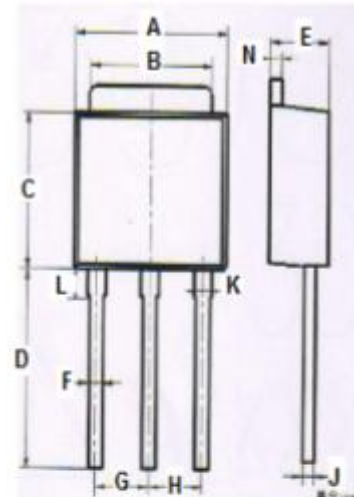
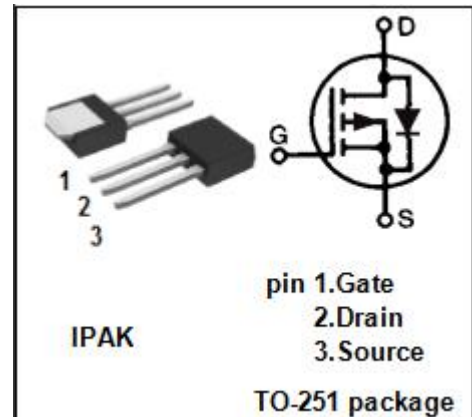
- Designed for use in switch mode power supplies and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-30	V
V_{GS}	Gate-Source Voltage-Continuous	± 25	V
I_D	Drain Current-Continuous	-70	A
I_{DM}	Drain Current-Single Pluse	-200	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	90	W
T_J	Max. Operating Junction Temperature	-55~175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.6	$^\circ C/W$



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

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=-0.25\text{mA}$	-30		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=-0.25\text{mA}$	-1.5	-3.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=-10\text{V}; I_D=-20\text{A}$		8.5	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 12\text{V}; V_{DS}=0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=-30\text{V}; V_{GS}=0$ $V_{DS}=-30\text{V}; V_{GS}=0@T_J=55^\circ\text{C}$		-1 -5	μA
V_{SD}	Forward On-Voltage	$I_S=-1\text{A}; V_{GS}=0$		-1	V

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