

isc P-Channel MOSFET Transistor

AOD423

• FEATURES

- With TO-252(DPAK) packaging
- High speed switching
- Low gate input resistance
- Standard level gate drive
- Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

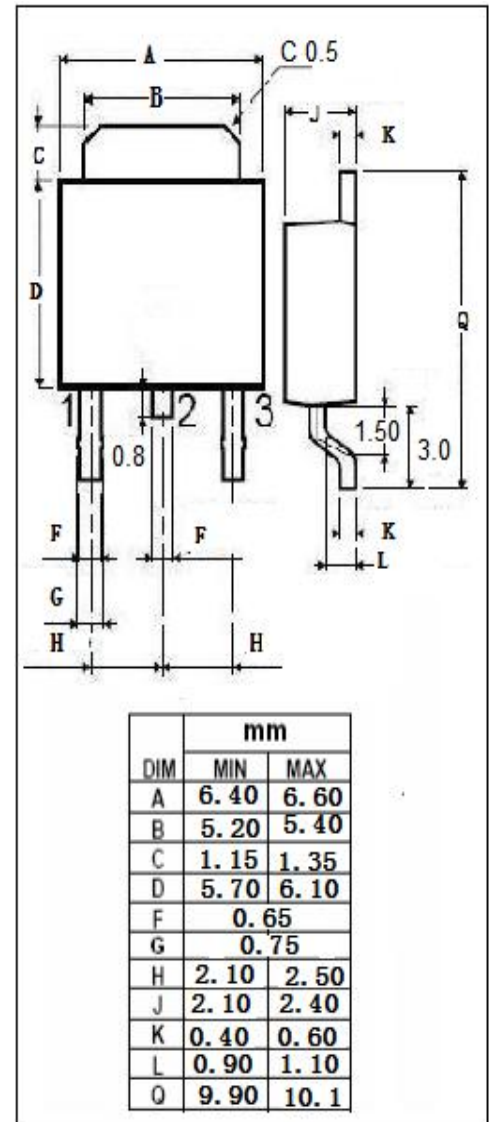
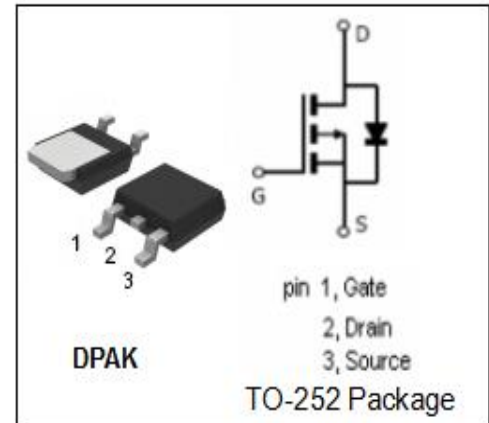
- Power supply
- Switching applications

• ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	-30	V
V_{GS}	Gate-Source Voltage	± 25	V
I_D	Drain Current-Continuous@ $T_c=25^{\circ}\text{C}$ $T_c=100^{\circ}\text{C}$	-70 -67	A
I_{DM}	Drain Current-Single Pulsed	-200	A
P_D	Total Dissipation	90	W
T_j	Operating Junction Temperature	175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~175	$^{\circ}\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	1.6	$^{\circ}\text{C/W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	50	$^{\circ}\text{C/W}$



isc P-Channel MOSFET Transistor**AOD423****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=-0.25mA$	-30			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=-0.25mA$	-1.5		-3.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=-10V; I_D=-20A$		6.2	8.0	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}=\pm 25V; V_{DS}=0V$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=-64V; V_{GS}=0V; T_J=25^{\circ}\text{C}$ $T_J=55^{\circ}\text{C}$			-1 -5	μA
V_{SDF}	Diode forward voltage	$I_{SD}=-1A, V_{GS}=0V$			-1	V

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