

isc N-Channel MOSFET Transistor

AOD254

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 46m\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

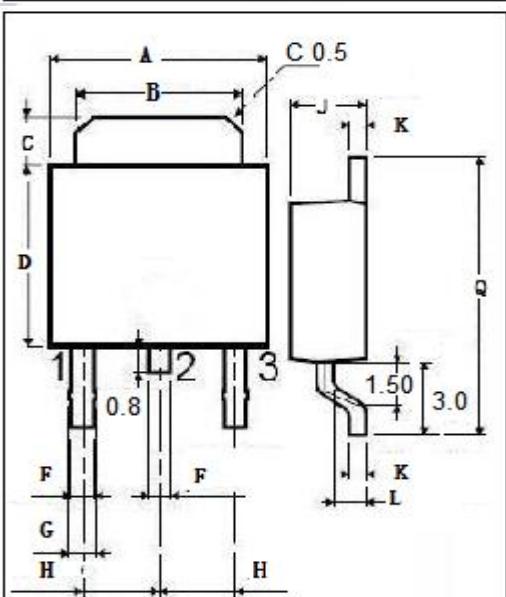
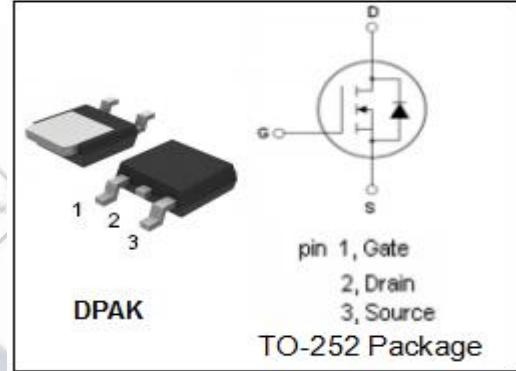
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	150	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	28	A
I_{DM}	Drain Current-Single Pulsed	45	A
P_D	Total Dissipation @ $T_c=25^\circ C$	100	W
T_j	Max. Operating Junction Temperature	175	°C
T_{stg}	Storage Temperature	-55~175	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.5	°C/W



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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D=250 \mu\text{A}$	150			V
$\text{V}_{\text{GS(th)}}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=\text{V}_{\text{GS}}; \text{I}_D=100 \mu\text{A}$	1.7		2.7	V
$\text{R}_{\text{DS(on)}}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}=10\text{V}; \text{I}_D=20\text{A}$			46	$\text{m}\Omega$
I_{GSS}	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 20\text{V}$			± 100	nA
I_{DSS}	Drain-Source Leakage Current	$\text{V}_{\text{DS}}=150\text{V}; \text{V}_{\text{GS}}= 0\text{V}$			1	μA
		$\text{V}_{\text{DS}}=150\text{V}; \text{V}_{\text{GS}}= 0\text{V}; \text{T}_c=55^\circ\text{C}$			5	μA
V_{SD}	Diode forward voltage	$\text{I}_s=1\text{A}, \text{V}_{\text{GS}} = 0\text{V}$			1	V