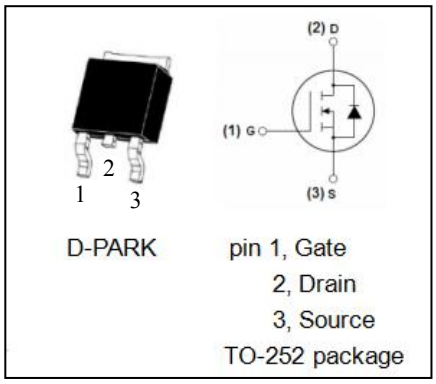
isc N-Channel MOSFET Transistor AOD496

• FEATURES

- Static drain-source on-resistance: $R_{DS(on)} \leqslant 9.5m\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• APPLICATIONS

- Be suitable for use as a high side switch in SMPS 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	62	A
I_{DM}	Drain Current-Single Pulsed	120	A
P_D	Total Dissipation @T_C=25℃	62.5	W
T_j T_{stg}	Operating Junction And Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	2.4	℃/W

• 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 μA	30		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D= 250 μA	1	2.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 20A		9.5	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V		±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 24V; V_{GS}= 0V		1	μA
V_{SD}	Diode forward voltage	I_S= 1A, V_{GS} = 0V		1	V

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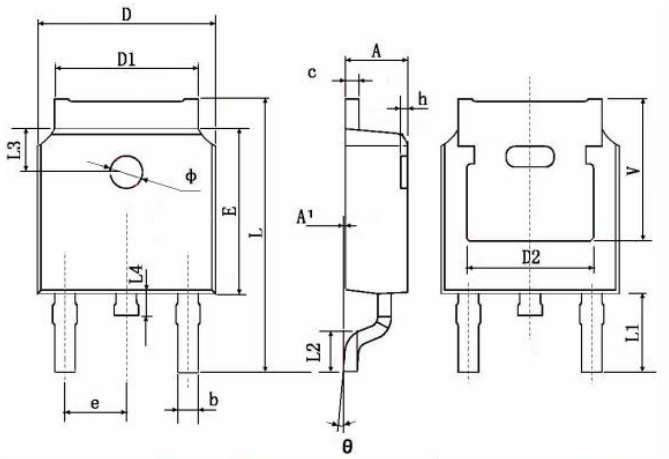
TO-252 Package Outline



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.660	0.860	0.026	0.034
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 TYP.		0.190 TYP.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 TYP.		0.114 TYP.	
L2	1.400	1.700	0.055	0.067
L3	1.600 TYP.		0.063 TYP.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 TYP.		0.211 TYP.	