



AOD4185/AOI4185

P-Channel Enhancement Mode Field Effect Transistor

General Description

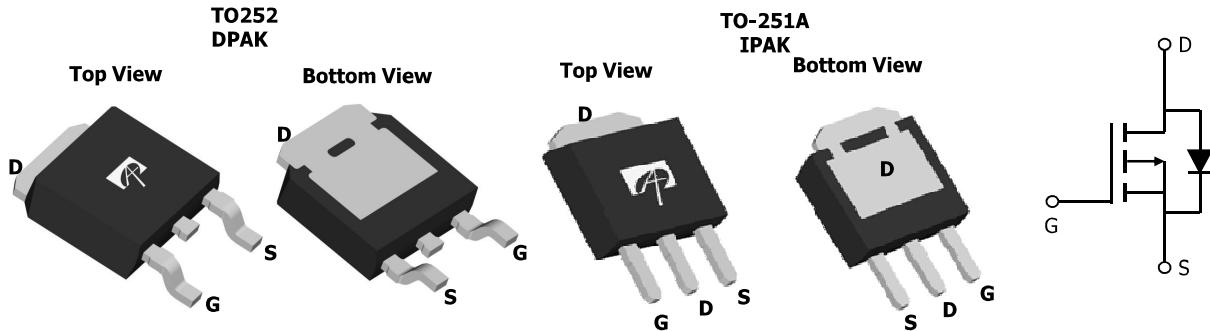
The AOD4185/AOI4185 uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge. With the excellent thermal resistance of the DPAK/IPAK package, this device is well suited for high current applications.

- RoHS Compliant
- Halogen Free*

Features

V_{DS} (V) = -40V
 I_D = -40A (V_{GS} = -10V)
 $R_{DS(ON)}$ < 15m Ω (V_{GS} = -10V)
 $R_{DS(ON)}$ < 20m Ω (V_{GS} = -4.5V)

100% UIS Tested!
100% Rg Tested!



Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Maximum	Units
Drain-Source Voltage	V_{DS}	-40	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current ^{B,H}	I_D	$T_C=25^\circ\text{C}$	A
		$T_C=100^\circ\text{C}$	
Pulsed Drain Current ^C	I_{DM}	-115	A
Avalanche Current ^C	I_{AR}	-42	
Repetitive avalanche energy $L=0.1\text{mH}$ ^C	E_{AR}	88	mJ
Power Dissipation ^B	P_D	$T_C=25^\circ\text{C}$	W
		$T_C=100^\circ\text{C}$	
Power Dissipation ^A	P_{DSM}	$T_A=25^\circ\text{C}$	W
		$T_A=70^\circ\text{C}$	
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Typ	Max	Units
Maximum Junction-to-Ambient ^{A,G}	$R_{\theta JA}$	15	20	$^\circ\text{C/W}$
$t \leq 10\text{s}$				
Maximum Junction-to-Ambient ^{A,G}	$R_{\theta JA}$	41	50	$^\circ\text{C/W}$
Steady-State				
Maximum Junction-to-Case ^{D,F}	$R_{\theta JC}$	2	2.4	$^\circ\text{C/W}$