

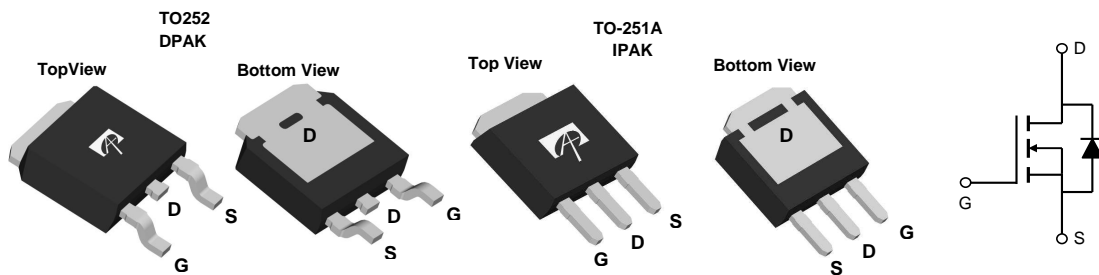
General Description

The AOD482/AOI482 combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. This device is ideal for boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

Product Summary

V_{DS}	100V
I_D (at $V_{GS}=10V$)	32A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	< 37m Ω
$R_{DS(ON)}$ (at $V_{GS} = 4.5V$)	< 42m Ω

100% UIS Tested
 100% R_g Tested



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

Parameter	Symbol	Maximum	Units
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	$T_C=25^\circ\text{C}$	32
		$T_C=100^\circ\text{C}$	22
Pulsed Drain Current ^C	I_{DM}	70	A
Continuous Drain Current	I_{DSM}	$T_A=25^\circ\text{C}$	5
		$T_A=70^\circ\text{C}$	4
Avalanche Current ^C	I_{AS}, I_{AR}	35	A
Avalanche energy $L=0.1\text{mH}$ ^C	E_{AS}, E_{AR}	61	mJ
Power Dissipation ^B	P_D	$T_C=25^\circ\text{C}$	100
		$T_C=100^\circ\text{C}$	50
Power Dissipation ^A	P_{DSM}	$T_A=25^\circ\text{C}$	2.5
		$T_A=70^\circ\text{C}$	1.6
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 $t \leq 10\text{s}$	$R_{\theta JA}$	14.2	20	$^\circ\text{C/W}$
Maximum Junction-to-Ambient ^{A D} Steady-State		39	50	$^\circ\text{C/W}$
Maximum Junction-to-Case Steady-State	$R_{\theta JC}$	0.8	1.5	$^\circ\text{C/W}$