AO3415
P-Channel Enhancement Mode Field Effect Transistor

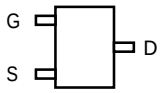
General Description

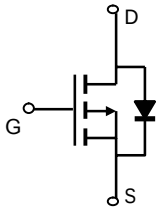
The AO3415 uses advanced trench technology to provide excellent $R_{DS(ON)}$, low gate charge and operation with gate voltages as low as 1.8V. This device is suitable for use as a load switch or in PWM applications. *AO3415 is Pb-free (meets ROHS & Sony 259 specifications).AO3415 is a Green Product ordering option.AO3415 is electrically identical.*

Features

V_{DS} (V) = -16V
I_D = -4 A
$R_{DS(ON)}$ < 45mΩ (V_{GS} = -4.5V)
$R_{DS(ON)}$ < 54mΩ (V_{GS} = -2.5V)
$R_{DS(ON)}$ < 75mΩ (V_{GS} = -1.8V)

(SOT-23)
Top View





Absolute Maximum Ratings T_A=25°C unless otherwise noted

Parameter		Symbol	Maximum	Units
Drain-Source Voltage-16		V_{DS}		V
Gate-Source Voltage		V_{GS}	±8	V
Continuous Drain Current [A]	T_A=25°C	I_D	-4.0	A
Pulsed Drain Current [B]		I_{DM}	-30	
Power Dissipation [A]	T_A=25°C	P_D	1.4	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	°C

Thermal Characteristics

Parameter		Symbol	Typ	Max	Units
Maximum Junction-to-Ambient [A]	t ≤ 10s	$R_{\theta JA}$	65	90	°C/W
Maximum Junction-to-Ambient [A]	Steady-State		85	125	°C/W
Maximum Junction-to-Lead [C]	Steady-State	$R_{\theta JL}$	43	60	°C/W