

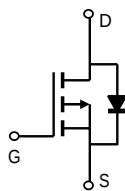
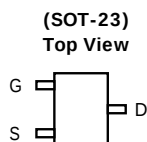
P-Channel Enhancement Mode Field Effect Transistor

General Description

The AO3401 uses advanced trench technology to provide excellent $R_{DS(ON)}$, low gate charge and operation with gate voltages as low as 2.5V. This device is suitable for use as a load switch or in PWM applications. *Standard product AO3401 is Pb-free (meets ROHS & Sony 259 specifications). AO3401 is a Green Product ordering option.*

Features

V_{DS} (V) = -30V
 I_D = -4.2 A (V_{GS} = -10V)
 $R_{DS(ON)} < 64m\Omega$ (V_{GS} = -10V)
 $R_{DS(ON)} < 75m\Omega$ (V_{GS} = -4.5V)
 $R_{DS(ON)} < 90m\Omega$ (V_{GS} = -2.5V)



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

Parameter	Symbol	Maximum	Units
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 12	V
Continuous Drain Current ^A	I_D	-4.2	A
$T_A=25^\circ\text{C}$		-3.5	
Pulsed Drain Current ^B	I_{DM}	-30	
Power Dissipation ^A	P_D	1.4	W
$T_A=25^\circ\text{C}$		1	
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Thermal Characteristics

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