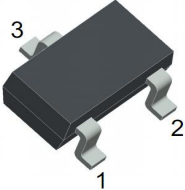
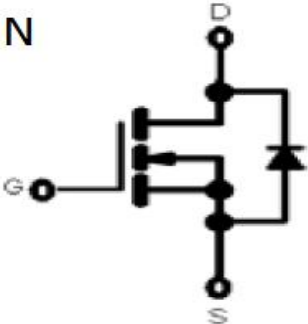


N-Channel 30-V(D-S) MOSFET		SOT-23 Plastic-Encapsulate MOSFETS	
<p style="text-align: center;"><u>SOT-23</u></p>  <p>1.GATE 2.SOURC 3.DRAIN</p> <p style="text-align: center;">Equivalent Circuit:</p> 		<p>DESCRIPTION :</p> <p>The AO3404 use advanced trench technology to provide excellent RDS(ON) and low gate charge. This device is suitable for use as a load switch or in PWM applications. The source leads are separated to allow a Kelvin connection to the source, which may be used to bypass the source inductance.</p> <p>MARKING:</p> 	
V(BR)DSS	RDS(on)MAX		ID
30 V	24.5mΩ@10V 37mΩ@4.5V		5.8A
Mosfet Maximum ratings (Ta=25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	30	V
Gate-Source Voltage	VGS	±20	
Continuous Drain Current	ID	5.8	A
Pulsed drain current *	IDM	30	
Power Dissipation	PD	1.0	W
Thermal Resistance from Junction to Ambient	RθJA	200	°C/W
Junction Temperature	TJ	150	°C
Storage Temperature	TSTG	-55~+150	°C
* Repetitive rating : Pulse width limited by maximum junction temperature.			

MOSFET ELECTRICAL CHARACTERISTICS						
unless otherwise specified Ta = 25 °C						
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static Parameters						
Drain-source breakdown voltage	V(BR)DSS	VGS = 0V, ID =250μA	30			V
Gate-threshold voltage	VGS(th)	VDS =VGS, ID =250μA	1		2.5	V
Gate-body leakage	IGSS	VDS =0V, VGS =±16V			±100	nA
Zero gate voltage drain current	IDSS	VDS =30V, VGS =0V			1	μA
Drain-source on-resistancea	RDS(on)	VGS =10V, ID = 1A		18	24.5	mΩ
		VGS =4.5V, ID = 1A		27	37	mΩ
Forward transconductancea	gfs	VDS =10V, ID = 1A	5			S
Diode forward voltage	VSD	IS= 1A,VGS=0V		0.8	1.28	V
Dynamic Parameters						
Input capacitance	Ciss	VDS =15V,VGS =0V,f=1MHz			820	pF
Output capacitance	Coss			118		pF
Reverse transfer capacitanceb	Crss			85		pF
Gate resistance	Rg	VDS =0V,VGS =0V,f =1MHz			1.5	Ω
Switching Parameters						
Turn-on delay time	td(on)	VGS=10V, VDS=15V RL=2.6Ω, RGEN=3Ω		4.5	6.5	ns
Rise time	tr			3.1		ns
Turn-off delay time	td(off)			15.1		ns
Fall time	tf			2.7		ns
Note :						
1. These parameters have no way to verify.						
2. Pulse Test ; Pulse Width ≤300μs, Duty Cycle ≤0.5%						