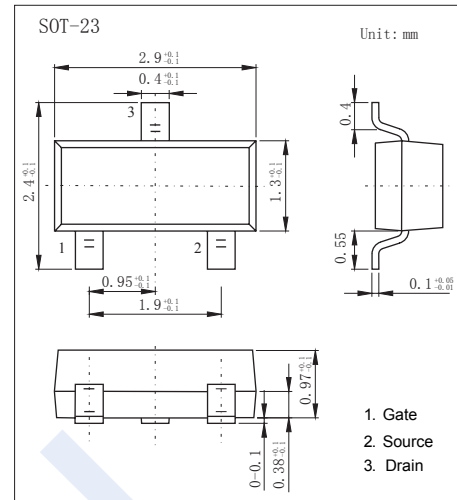
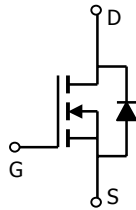


N-Channel MOSFET

AO3410 (KO3410)

■ Features

- $V_{DS} (V) = 30V$
- $I_D = 5.8 A (V_{GS} = 10V)$
- $R_{DS(ON)} < 28m\Omega (V_{GS} = 10V)$
- $R_{DS(ON)} < 33m\Omega (V_{GS} = 4.5V)$
- $R_{DS(ON)} < 52m\Omega (V_{GS} = 2.5V)$
- $R_{DS(ON)} < 70m\Omega (V_{GS} = 1.8V)$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 12	
Continuous Drain Current	I_D	$T_A=25^\circ C$	5.8
		$T_A=70^\circ C$	
Pulsed Drain Current	I_{DM}	30	A
Power Dissipation	P_D	$T_A=25^\circ C$	1.4
		$T_A=70^\circ C$	
Thermal Resistance.Junction- to-Ambient	R_{thJA}	$t \leq 10s$	90
		Steady-State	125
Thermal Resistance.Junction- to-Lead	R_{thJL}	60	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

N-Channel MOSFET

AO3410 (KO3410)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =250 μA, V _{GS} =0V	30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =24V, V _{GS} =0V			1	μA
		V _{DS} =24V, V _{GS} =0V, T _J =55°C			5	
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±12V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250 μA	0.5		1	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =5.8A			28	mΩ
		V _{GS} =10V, I _D =5.8A, T _J =125°C			39	
		V _{GS} =4.5V, I _D =5A			33	
		V _{GS} =2.5V, I _D =4A			42	
		V _{GS} =1.8V, I _D =3A			72	
On State Drain Current	I _{D(ON)}	V _{GS} =4.5V, V _{DS} =5V	30			A
Forward Transconductance	g _{FS}	V _{DS} =5V, I _D =5A	12	17		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =15V, f=1MHz		767		pF
Output Capacitance	C _{oss}			111		
Reverse Transfer Capacitance	C _{rss}			82		
Gate Resistance	R _g	V _{GS} =0V, V _{DS} =0V, f=1MHz		1.3		Ω
Total Gate Charge	Q _g	V _{GS} =4.5V, V _{DS} =15V, I _D =5.8A		10		nC
Gate Source Charge	Q _{gs}			1.2		
Gate Drain Charge	Q _{gd}			3.1		
Turn-On DelayTime	t _{d(on)}	V _{GS} =10V, V _{DS} =15V, R _L =2.7Ω, R _G =6Ω		5		ns
Turn-On Rise Time	t _r			5.5		
Turn-Off DelayTime	t _{d(off)}			39		
Turn-Off Fall Time	t _f			4.7		
Body Diode Reverse Recovery Time	t _{rr}	I _F =5A, di/dt=100A/μs		15		nC
Body Diode Reverse Recovery Charge	Q _{rr}			7.1		
Maximum Body-Diode Continuous Current	I _S				2.5	A
Diode Forward Voltage	V _{SD}	I _S =1A, V _{GS} =0V			1	V

■ Marking

Marking	AA*
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