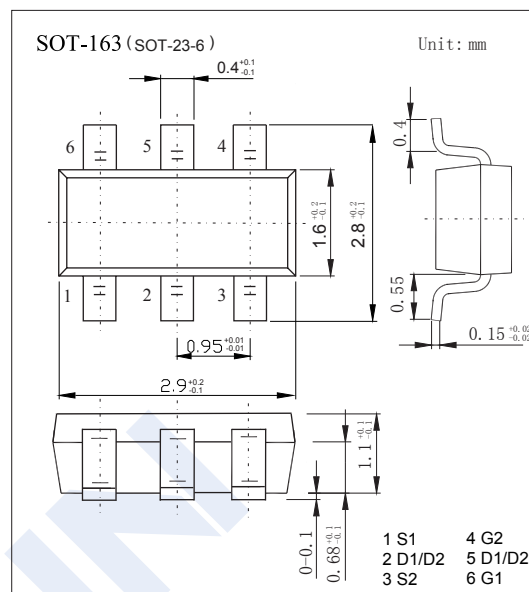
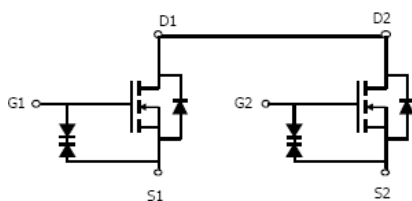


Dual N-Channel MOSFET

AO6808 (KO6808)

■ Features

- $V_{DS} (V) = 20V$
- $I_D = 6 A (V_{GS} = 4.5V)$
- $R_{DS(ON)} < 23m\Omega (V_{GS} = 4.5V)$
- $R_{DS(ON)} < 25m\Omega (V_{GS} = 4V)$
- $R_{DS(ON)} < 27m\Omega (V_{GS} = 3.1V)$
- $R_{DS(ON)} < 30m\Omega (V_{GS} = 2.5V)$
- ESD Rating: 2000V HBM

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

Parameter		Symbol	10 Sec	Steady State	Unit
Drain-Source Voltage		V _{DS}	20		V
Gate-Source Voltage		V _{GS}	± 12		
Continuous Drain Current	TA=25°C	I _D	6	4.6	A
	TA=70°C		4.6	3.7	
Pulsed Drain Current		I _{DM}	60		W
Power Dissipation	TA=25°C	P _D	1.3	0.8	
	TA=70°C		0.8	0.5	
Thermal Resistance.Junction- to-Ambient		R _{thJA}	95	150	°C/W
Thermal Resistance.Junction- to-Lead		R _{thJL}	-	68	
Junction Temperature		T _J	150		°C
Storage Temperature Range		T _{stg}	-55 to 150		

Dual N-Channel MOSFET

AO6808 (KO6808)

■ 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	20			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =20V, V _{GS} =0V			1	μA
		V _{DS} =20V, V _{GS} =0V, T _J =55°C			5	
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±10V			±10	μA
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} =4.5V, I _D =6A			23	mΩ
		V _{GS} =4.5V, I _D =6A, T _J =125°C			33	
		V _{GS} =4V, I _D =5.5A			25	
		V _{GS} =3.1V, I _D =5A			27	
		V _{GS} =2.5V, I _D =2A			30	
On State Drain Current	I _{D(on)}	V _{GS} =4.5V, V _{DS} =5V	60			A
Forward Transconductance	g _{FS}	V _{DS} =5V, I _D =6A		34		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =10V, f=1MHz		620	780	pF
Output Capacitance	C _{oss}			125		
Reverse Transfer Capacitance	C _{rss}			64		
Total Gate Charge (10V)	Q _g	V _{GS} =10V, V _{DS} =10V, I _D =6A		16.2	21	nC
Total Gate Charge (4.5V)				7.7	10	
Gate Source Charge	Q _{gs}			1.5		
Gate Drain Charge	Q _{gd}			2.7		
Turn-On DelayTime	t _{d(on)}			236		ns
Turn-On Rise Time	t _r	V _{GS} =10V, V _{DS} =10V, R _L =1.7 Ω, R _G =3 Ω		448		
Turn-Off DelayTime	t _{d(off)}			9.5		us
Turn-Off Fall Time	t _f			4.1		
Body Diode Reverse Recovery Time	t _{rr}	I _F =6A, di/dt=100A/us		25	33	ns
Body Diode Reverse Recovery Charge	Q _{rr}			9		nC
Maximum Body-Diode Continuous Current	I _S				1.3	A
Diode Forward Voltage	V _{SD}	I _S =1A, V _{GS} =0V			1	V

* The static characteristics in Figures 1 to 6 are obtained using <300us pulses, duty cycle 0.5% max.

■ Marking

Marking	H8**
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Dual N-Channel MOSFET

AO6808 (KO6808)

■ Typical Characteristics

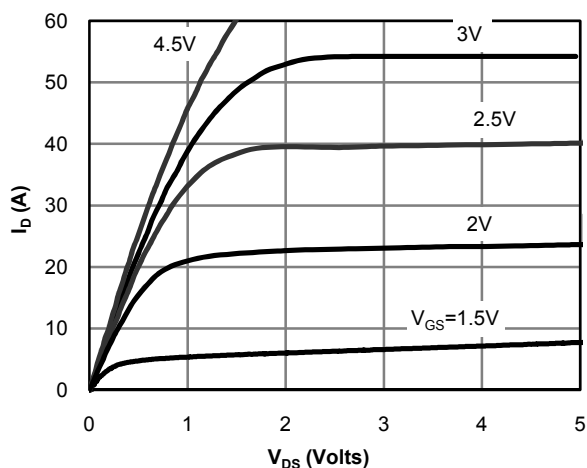


Figure 1: On-Region Characteristics

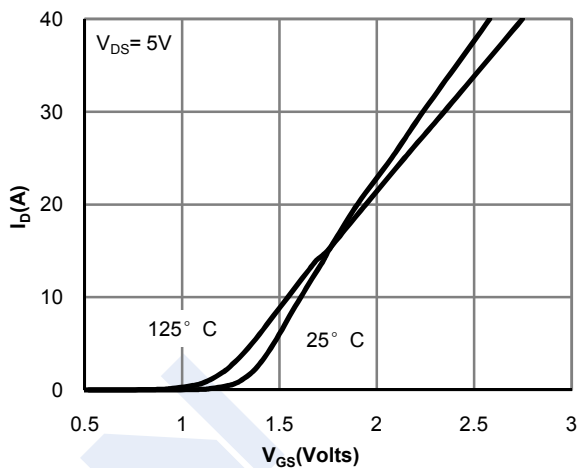


Figure 2: Transfer Characteristics

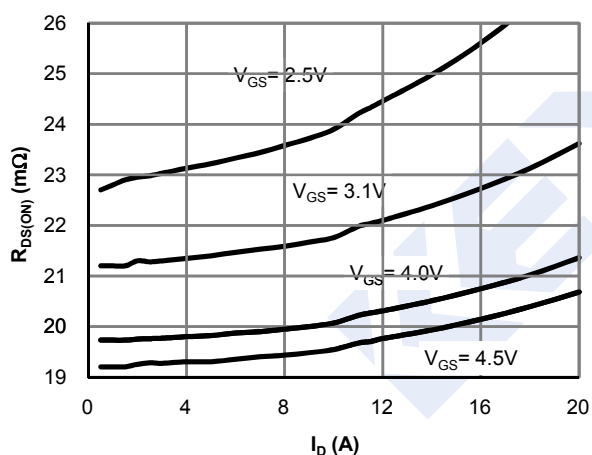


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

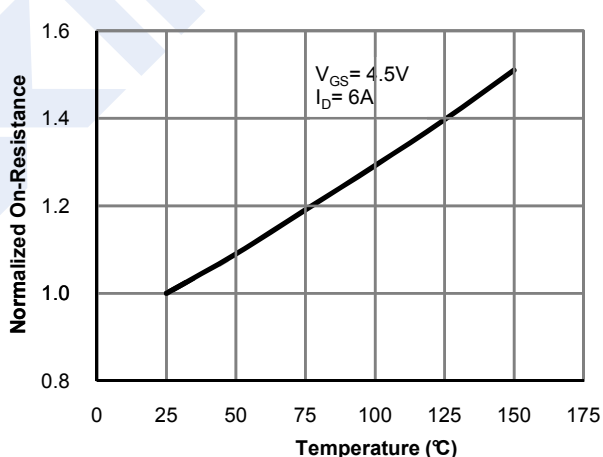


Figure 4: On-Resistance vs. Junction Temperature

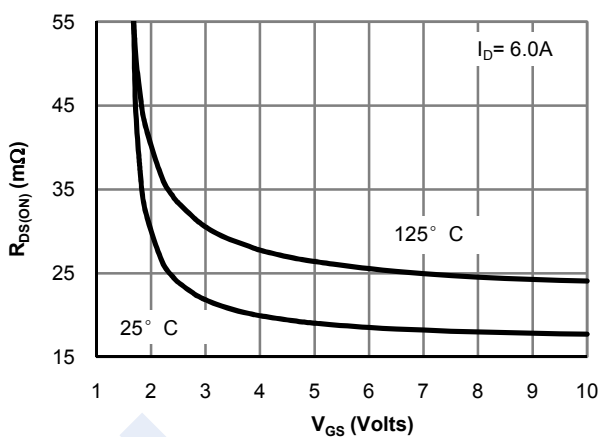


Figure 5: On-Resistance vs. Gate-Source Voltage

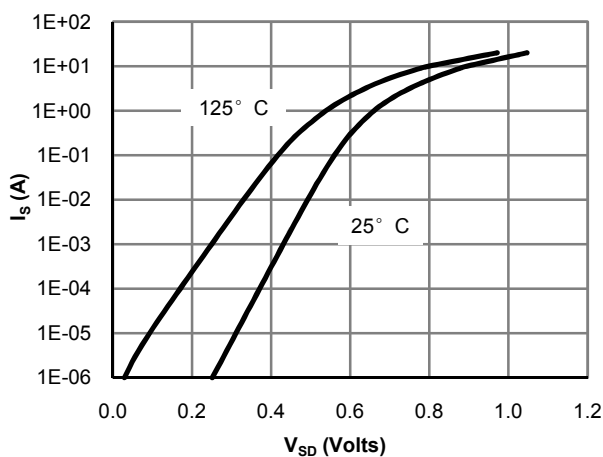


Figure 6: Body-Diode Characteristics

Dual N-Channel MOSFET

AO6808 (KO6808)

■ Typical Characteristics

