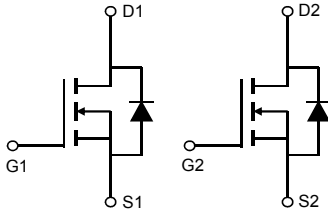
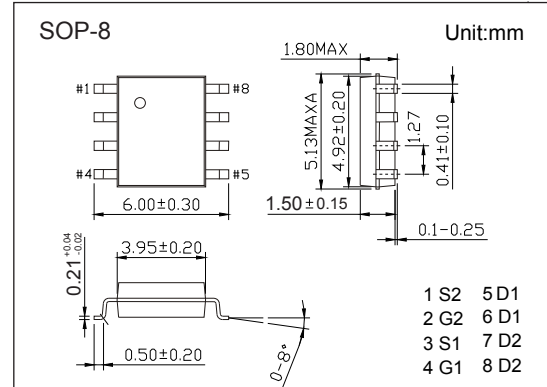


Dual N-Channel MOSFET

AO4882 (KO4882)

■ Features

- $V_{DS} (V) = 40V$
- $I_D = 8A (V_{GS} = 10V)$
- $R_{DS(ON)} < 19m\Omega (V_{GS} = 10V)$
- $R_{DS(ON)} < 27m\Omega (V_{GS} = 4.5V)$

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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	$T_A=25^\circ C$	A
		$T_A=70^\circ C$	
Pulsed Drain Current	I_{DM}	40	A
Avalanche Current	I_{AS}	15	
Avalanche Energy	E_{AS}	11	mJ
Power Dissipation	P_D	$T_A=25^\circ C$	W
		$T_A=70^\circ C$	
Thermal Resistance.Junction- to-Ambient	R_{thJA}	$t \leq 10s$	$^\circ C/W$
		Steady-State	
Thermal Resistance.Junction- to-Lead	R_{thJL}	40	$^\circ C/W$
Junction Temperature	T_J	150	
Storage Temperature Range	T_{stg}	-55 to 150	$^\circ C$

Dual N-Channel MOSFET

AO4882 (K04882)

■ 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	40			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =40V, V _{GS} =0V			1	μA
		V _{DS} =40V, V _{GS} =0V, T _J =55°C			5	
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	1.4		2.4	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =8A			19	mΩ
		V _{GS} =10V, I _D =8A, T _J =125°C			29	
		V _{GS} =4.5V, I _D =4A			27	
On state drain current	I _{D(on)}	V _{GS} =10V, V _{DS} =5V	40			A
Forward Transconductance	g _{FS}	V _{DS} =5V, I _D =8A		33		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =20V, f=1MHz		415		pF
Output Capacitance	C _{oss}			112		
Reverse Transfer Capacitance	C _{rss}			11		
Gate Resistance	R _g	V _{GS} =0V, V _{DS} =0V, f=1MHz	1		3.5	Ω
Total Gate Charge (10V)	Q _g	V _{GS} =10V, V _{DS} =20V, I _D =8A		6.5	12	nC
Total Gate Charge (4.5V)				3	6	
Gate Source Charge	Q _{gs}			1.2		
Gate Drain Charge	Q _{gd}			1.1		
Turn-On DelayTime	t _{d(on)}		V _{GS} =10V, V _{DS} =20V, R _L =2.5Ω, R _{GEN} =3Ω		4	
Turn-On Rise Time	t _r			3		
Turn-Off DelayTime	t _{d(off)}			15		
Turn-Off Fall Time	t _f			2		
Body Diode Reverse Recovery Time	t _{rr}	I _F = 8A, di/dt= 100A/us		12.5		nC
Body Diode Reverse Recovery Charge	Q _{rr}			3.5		
Maximum Body-Diode Continuous Current	I _S				2.5	A
Diode Forward Voltage	V _{SD}	I _S =1A, V _{GS} =0V			1	V

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

■ Marking

Marking	4882
	KA****

Dual N-Channel MOSFET AO4882 (KO4882)

■ Typical Characteristics

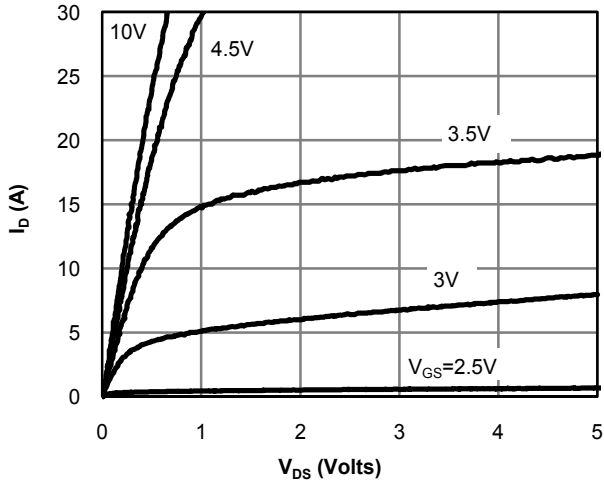


Fig 1: On-Region Characteristics (Note E)

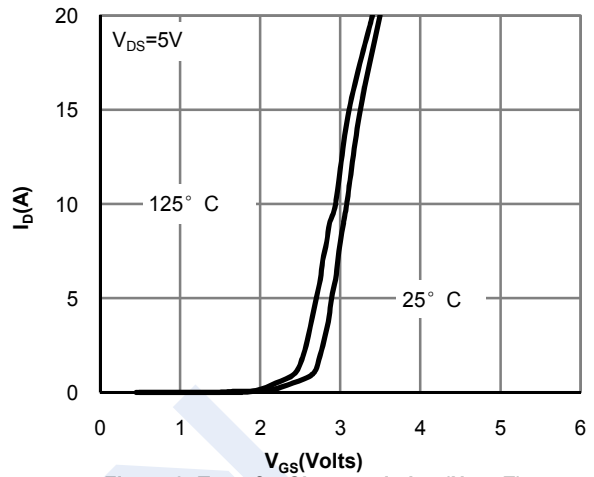


Figure 2: Transfer Characteristics (Note E)

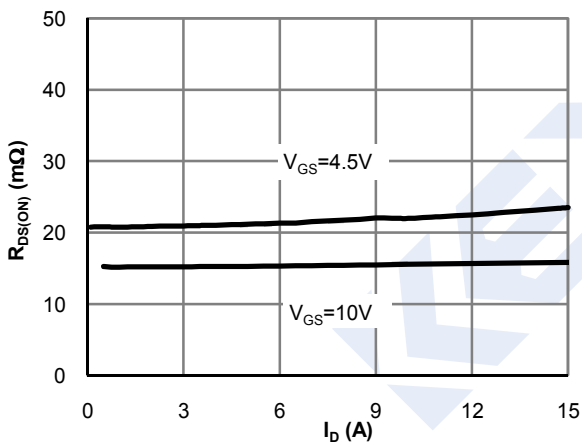


Figure 3: On-Resistance vs. Drain Current and Gate Voltage (Note E)

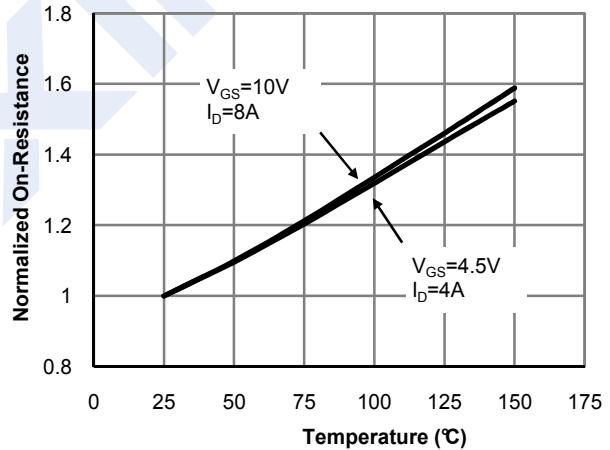


Figure 4: On-Resistance vs. Junction Temperature

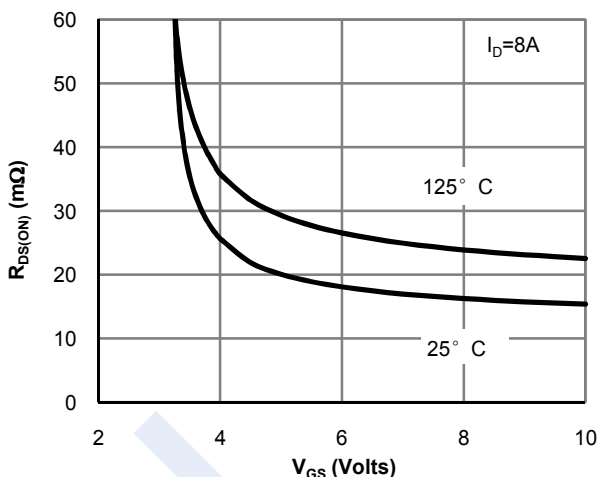


Figure 5: On-Resistance vs. Gate-Source Voltage

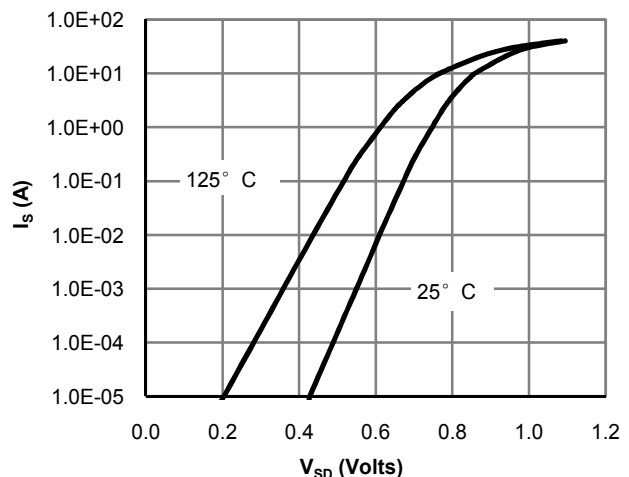


Figure 6: Body-Diode Characteristics (Note E)

Dual N-Channel MOSFET AO4882 (KO4882)

■ Typical Characteristics

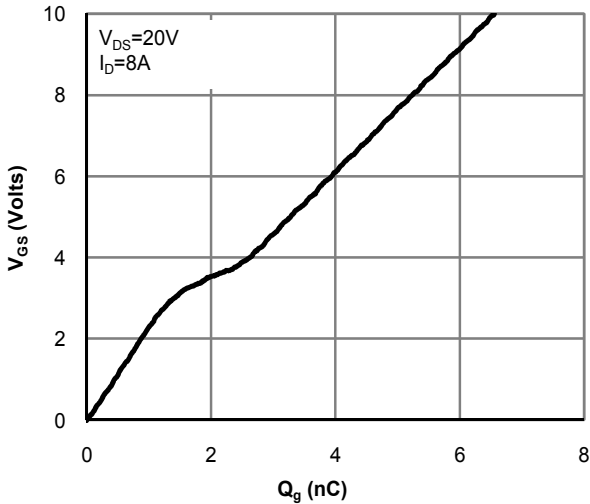


Figure 7: Gate-Charge Characteristics

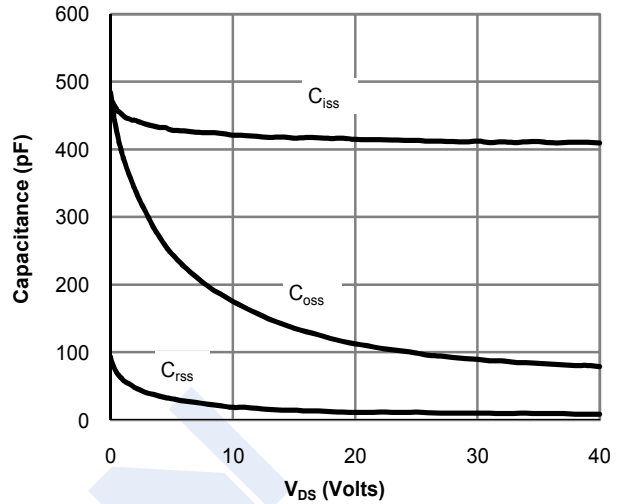


Figure 8: Capacitance Characteristics

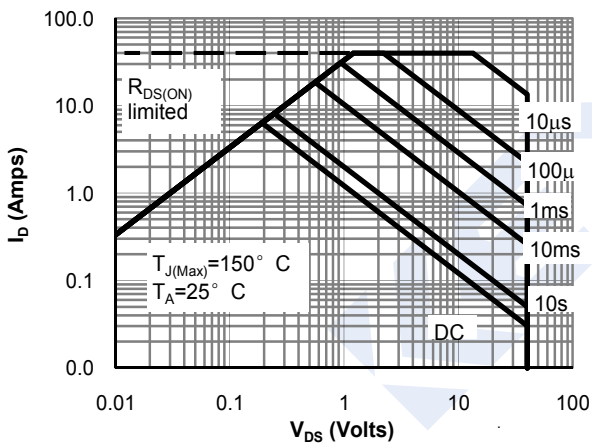


Figure 10: Maximum Forward Biased Safe Operating Area (Note F)

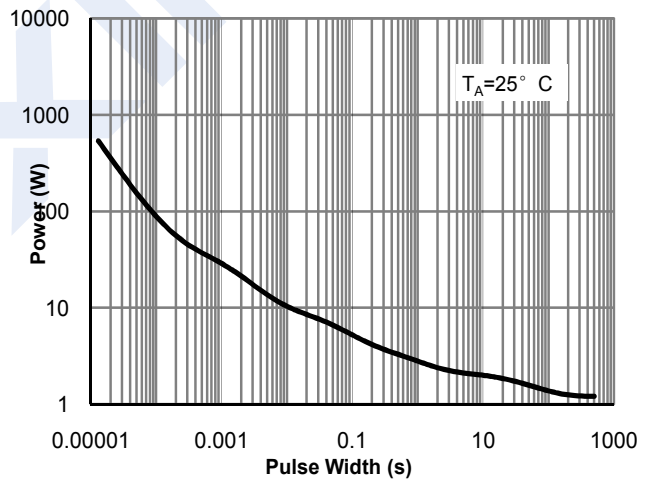


Figure 11: Single Pulse Power Rating Junction-to-Ambient (Note F)

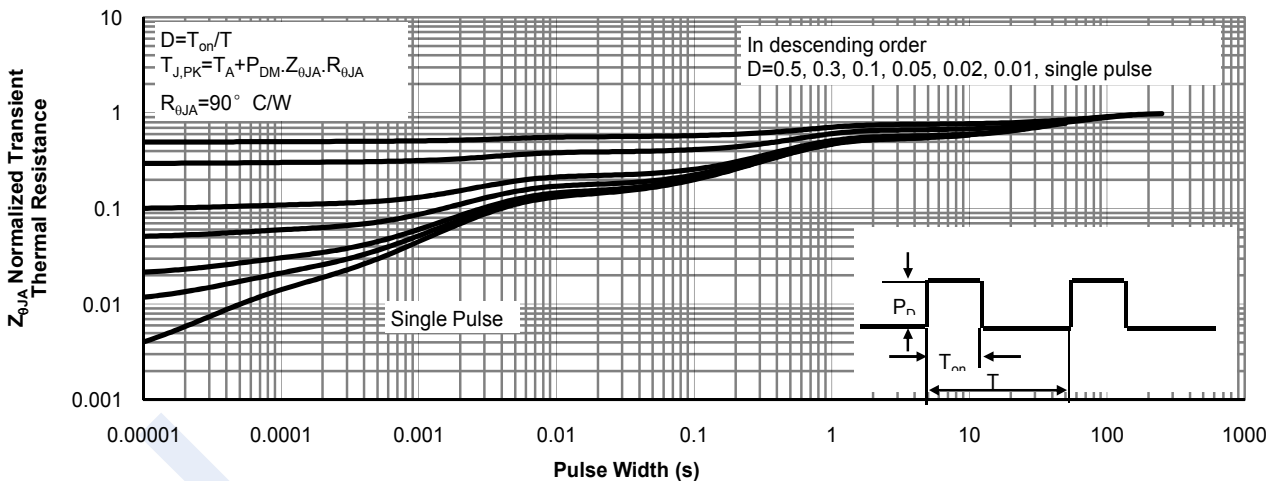


Figure 12: Normalized Maximum Transient Thermal Impedance (Note F)