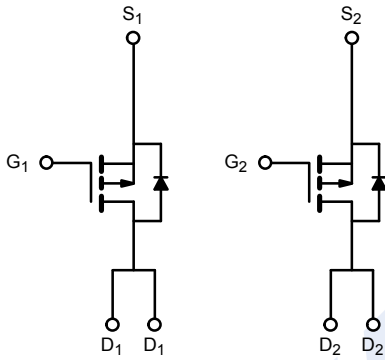
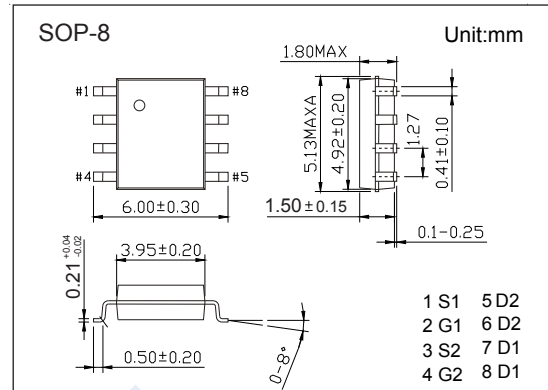


Dual P-Channel MOSFET

SI4953ADY (KI4953ADY)

■ Features

- $V_{DS} (V) = -30V$
- $I_D = -4.9 A (V_{GS} = -10V)$
- $R_{DS(ON)} < 53m\Omega (V_{GS} = -10V)$
- $R_{DS(ON)} < 90m\Omega (V_{GS} = -4.5V)$



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

Parameter	Symbol	10 secs	Steady State	Unit	
Drain-Source Voltage	V_{DS}	-30		V	
Gate-Source Voltage	V_{GS}	± 20			
Continuous Drain Current	I_D	$T_a = 25^\circ C$	-4.9	-3.7	A
		$T_a = 70^\circ C$	-3.9	-2.9	
Pulsed Drain Current	I_{DM}	-30			
Power Dissipation	P_D	$T_a = 25^\circ C$	2	1.1	W
		$T_a = 70^\circ C$	1.3	0.7	
Thermal Resistance.Junction- to-Ambient	R_{thJA}	62.5	110	$^\circ C/W$	
Thermal Resistance.Junction- to-Case	R_{thJC}	-	40		
Junction Temperature	T_J	150		$^\circ C$	
Junction Storage Temperature Range	T_{stg}	-55 to 150			

Dual P-Channel MOSFET

SI4953ADY (KI4953ADY)

■ Electrical Characteristics Ta = 25°C

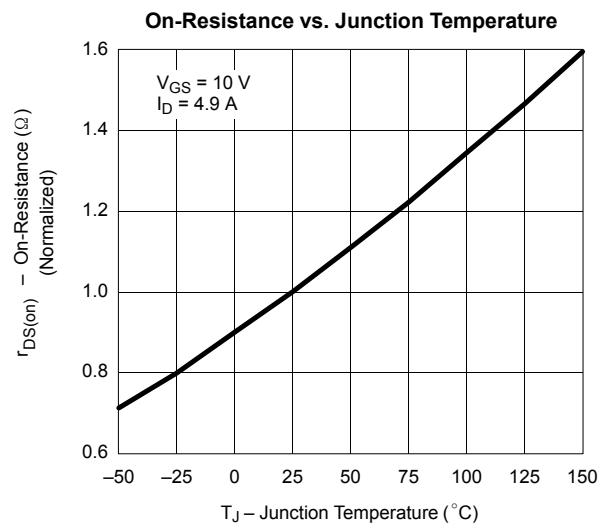
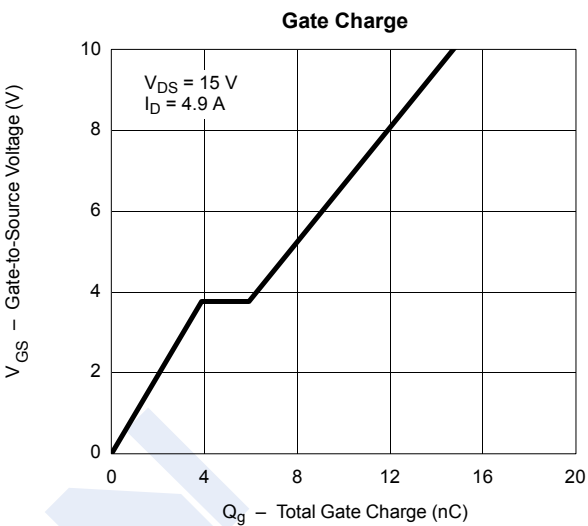
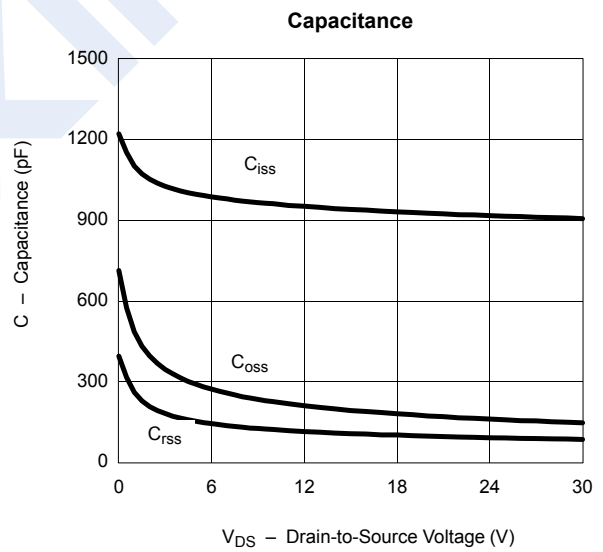
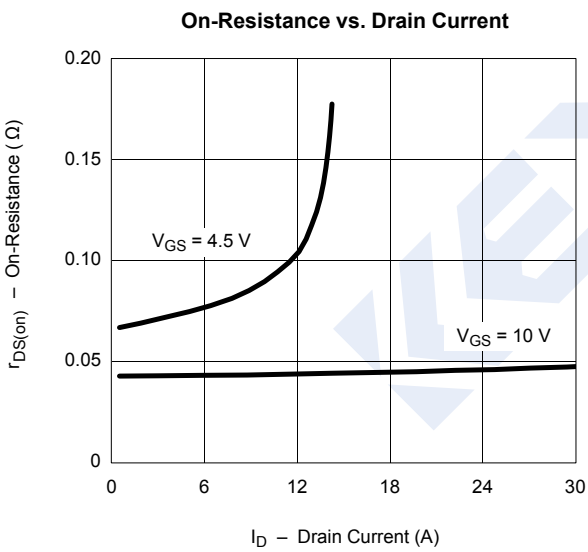
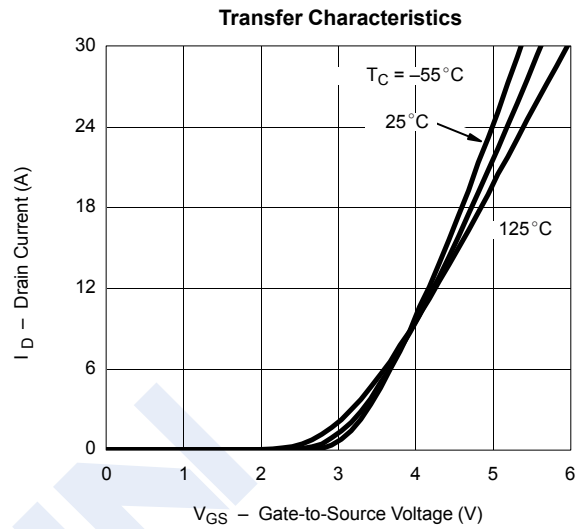
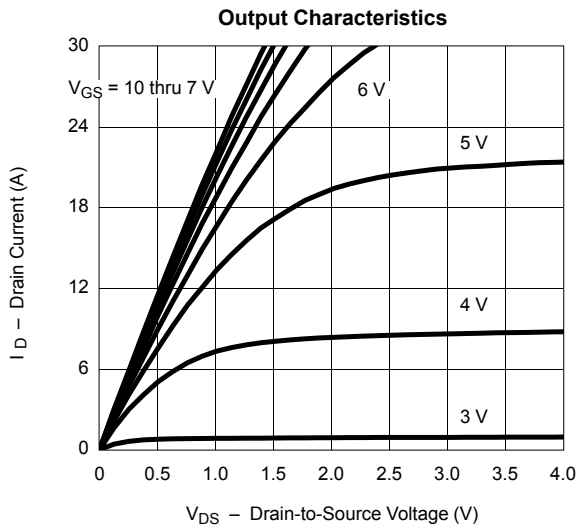
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =-250 μA, V _{GS} =0V	-30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-30V, V _{GS} =0V			-1	μA
		V _{DS} =-30V, V _{GS} =0V, T _J =55°C			-25	
Gate-Body leakage current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250μA	-1		-3	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-4.9A			53	mΩ
		V _{GS} =-4.5V, I _D =-3.7A			90	
On state drain current	I _{D(ON)}	V _{GS} =-10V, V _{DS} =-5V	-30			A
Forward Transconductance	g _{FS}	V _{DS} =-10V, I _D =-4.9A		9		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =-10V, f=1MHz			1100	pF
Output Capacitance	C _{oss}				297	
Reverse Transfer Capacitance	C _{rss}				185	
Total Gate Charge	Q _g	V _{GS} =-10V, V _{DS} =-15V, I _D =-4.9A		15	25	nC
Gate Source Charge	Q _{gs}			4		
Gate Drain Charge	Q _{gd}			2		
Turn-On DelayTime	t _{d(on)}	V _{GS} =-10V, V _{DS} =-15V, I _D =-1A, R _L =15 Ω, R _{GEN} =6 Ω		7	15	ns
Turn-On Rise Time	t _r			10	20	
Turn-Off DelayTime	t _{d(off)}			40	80	
Turn-Off Fall Time	t _f			20	40	
Body Diode Reverse Recovery Time	t _{rr}	I _F =-1.7A, dI/dt=100A/us		30	60	
Continuous Source Current	I _S				-1.7	A
Diode Forward Voltage	V _{SD}	I _S =-1.7A, V _{GS} =0V			-1.2	V

■ Marking

Marking	4953A KA****
---------	-----------------

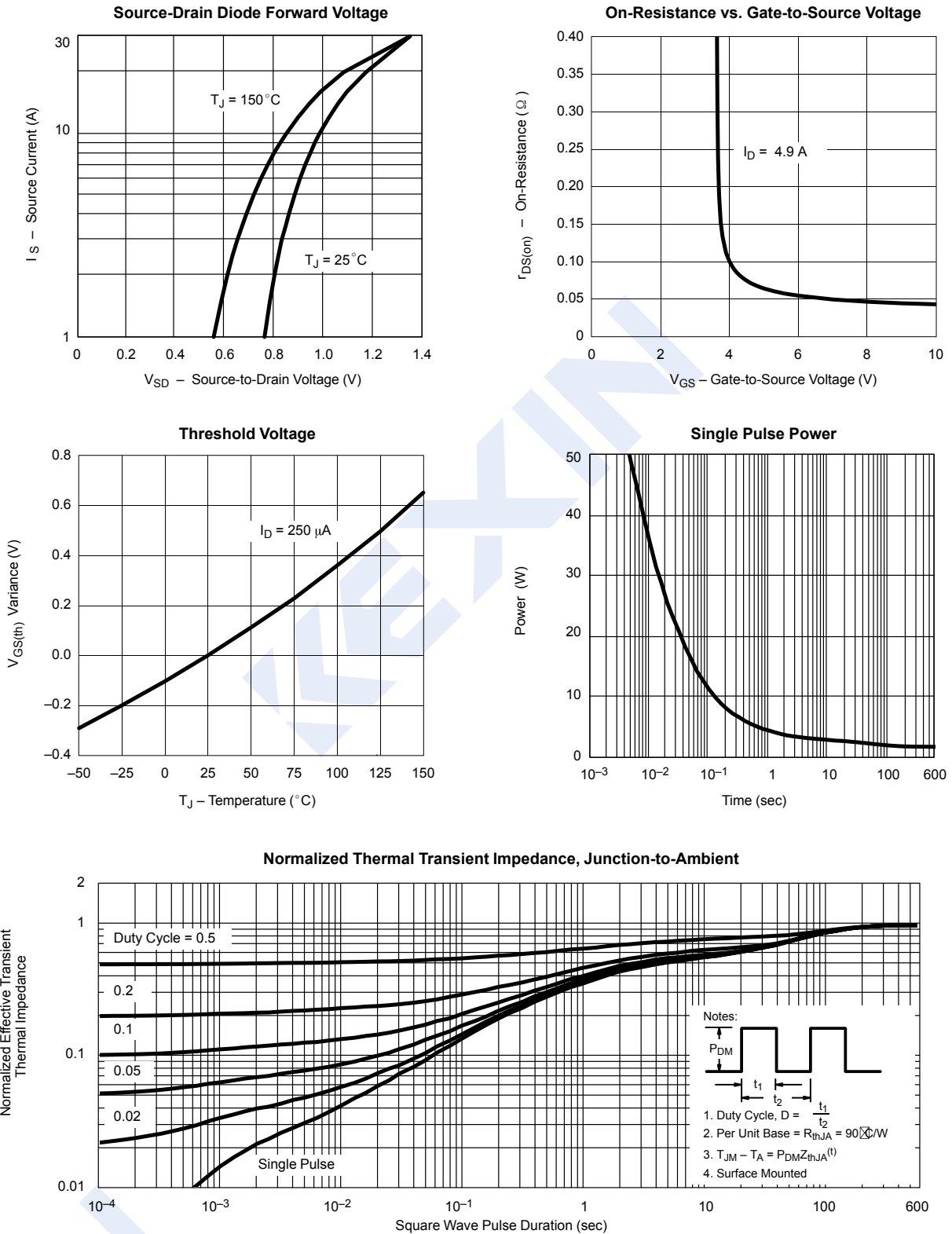
Dual P-Channel MOSFET SI4953ADY (KI4953ADY)

Typical Characteristics



Dual P-Channel MOSFET SI4953ADY (KI4953ADY)

■ Typical Characteristics



Dual P-Channel MOSFET SI4953ADY (KI4953ADY)

■ Typical Characteristics

