

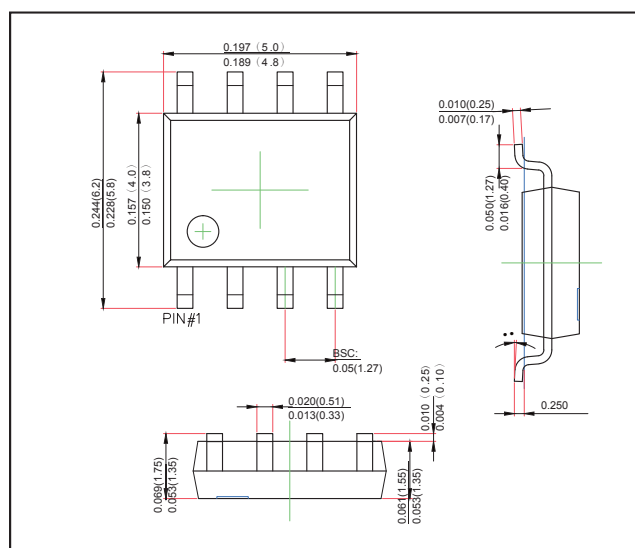
SOP-8 Plastic-Encapsulate MOSFETS

FEATURES

- $V_{DS} (V) = -30V$
- $I_D = -4.9 A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 53m\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 95m\Omega$ ($V_{GS} = -4.5V$)

MECHANICAL DATA

- Case style:SOP-8 molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V _{DS}	-30	V
Gate-Source Voltage		V _{GS}	±20	
Continuous Drain Current	T _a = 25 °C	I _D	-4.9	A
	T _a = 70 °C		-3.9	
Pulsed Drain Current		I _{DM}	-30	
Power Dissipation	T _a = 25 °C	P _D	2	W
	T _a = 70 °C		1.3	
Thermal Resistance.Junction- to-Ambient		R _{thJA}	62.5	°C/W
Junction Temperature		T _J	150	°C
Junction Storage Temperature Range		T _{stg}	-55 to 150	

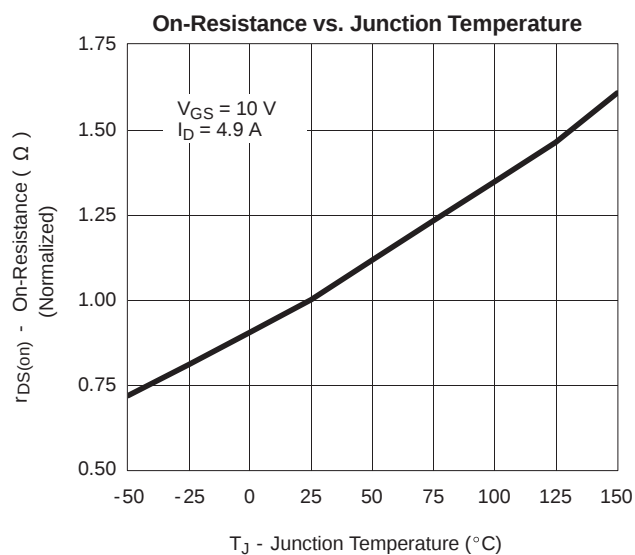
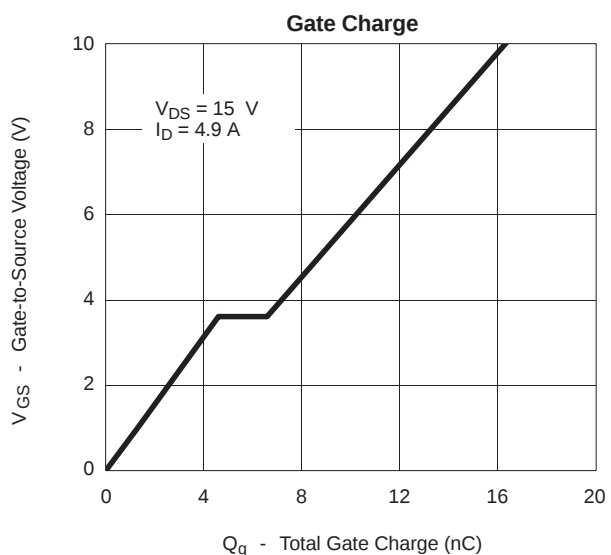
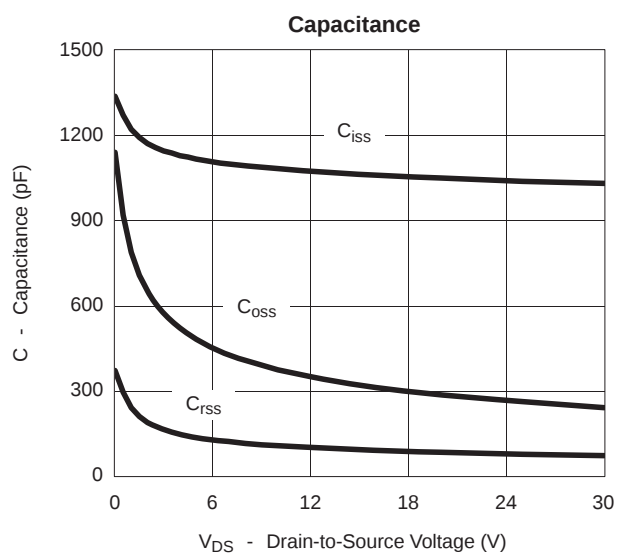
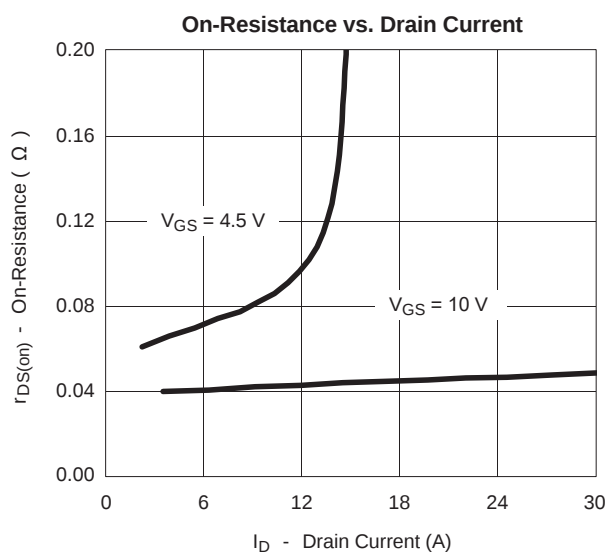
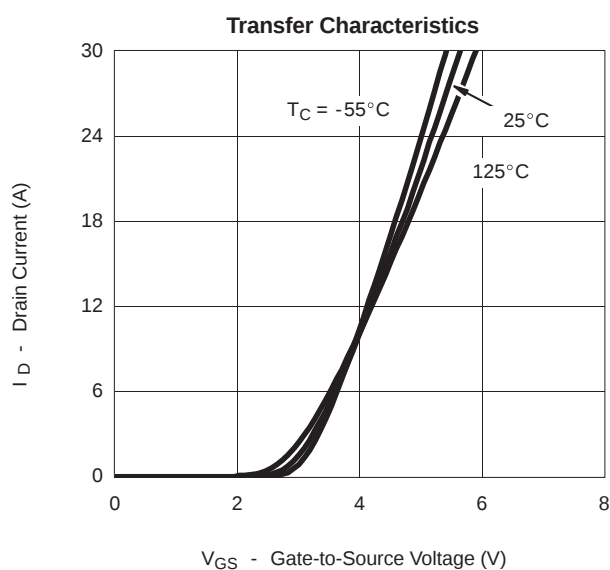
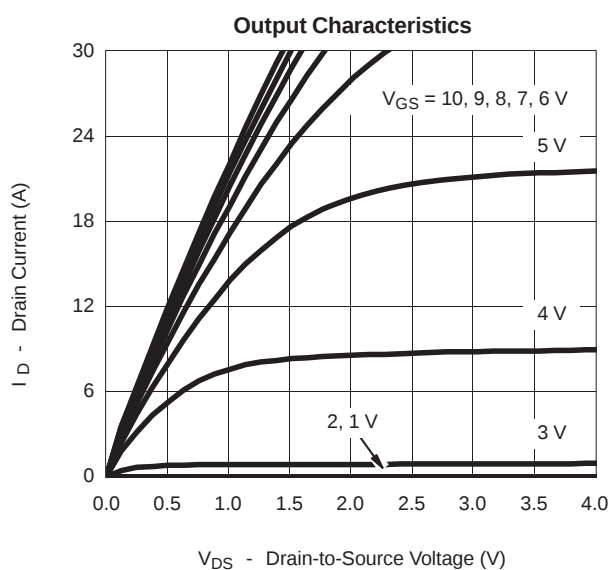
MOSFET ELECTRICAL CHARACTERISTICS $T_A=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =-250 μ A, 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℃			-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 =-250 μ A	-1		-3	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-4.9A (Note.1)			53	mΩ
		V _{GS} =-4.5V, I _D =-3.6A (Note.1)			95	
On state drain current	I _{D(ON)}	V _{GS} ≤-5 V,V _{DS} =-10 V (Note.1)	-20			A
Forward Transconductance	g _{FS}	V _{DS} =-15V, I _D =-4.9A (Note.1)		10		S
Gate resistance	R _g		2		7.1	Ω
Total Gate Charge	Q _g	V _{GS} =-10V, V _{DS} =-15V, I _D =-4.9A		16	25	nC
Gate Source Charge	Q _{gs}			5		
Gate Drain Charge	Q _{gd}			2		
Turn-On DelayTime	t _{d(on)}	V _{GS} =-10V, V _{DS} =-15V , R _L =15 Ω ,R _G =6 Ω		9	15	ns
Turn-On Rise Time	t _r			13	20	
Turn-Off DelayTime	t _{d(off)}			25	40	
Turn-Off Fall Time	t _f			15	25	
Body Diode Reverse Recovery Time	t _{rr}	I _F =-1.7A, dI/dt=100A/ μ s		60	90	
Diode Forward Voltage	V _{SD}	I _S =-1.7A,V _{GS} =0V (Note.1)			-1.2	V

Note.1:Pulse test; pulse width ≤ 300 us, duty cycle $\leq 2\%$.

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics



RATINGS AND CHARACTERISTIC CURVES

