

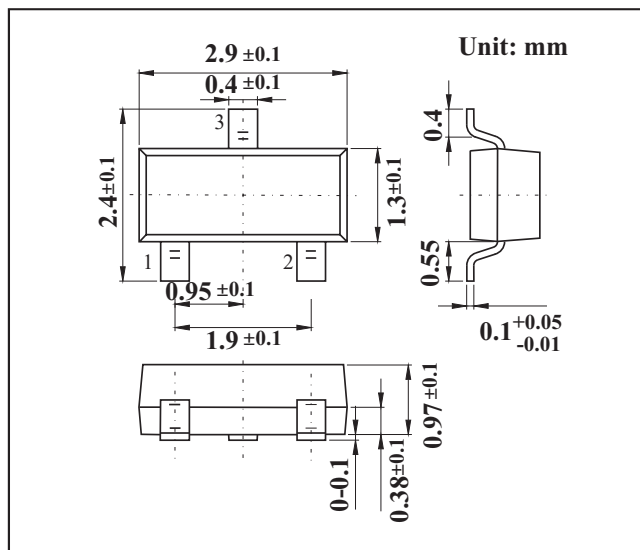
SOT-23 Plastic-Encapsulate MOSFETS

Features

- VDS=-30V, rDS(on)=0.080Ω,VGS=-10V,ID=-3A
- VDS=-30V, rDS(on)=0.140Ω,VGS=-4.5V,ID=-2.5A
- P-Channel 30-V (D-S) MOSFET

MECHANICAL DATA

- Case style:SOT-23molded 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	V
Continuous Drain Current T _A =25°C T _A =70°C	I _D	-3 -2.5	A
Pulsed Drain Current *	I _{DM}	-12	A
Power Dissipation T _A =25°C T _A =70°C	P _D	1.25 0.8	W
Maximum Junction-to-Ambient *	R _{thJA}	130	°C/ W
Jumction Temperature,Storage Temperature	T _J ,T _{stg}	-55 to 150	°C

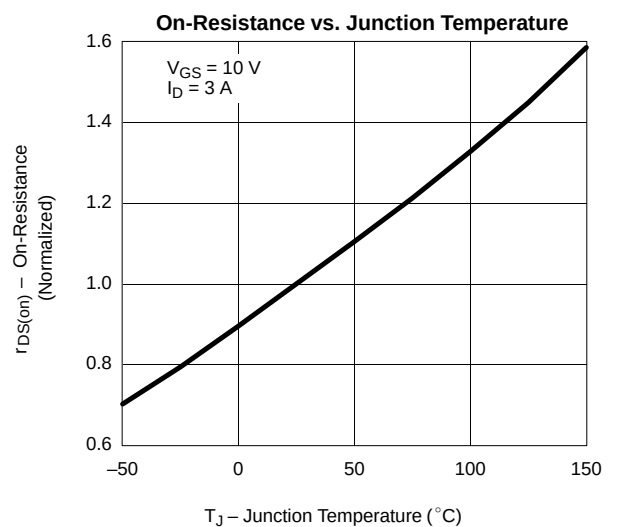
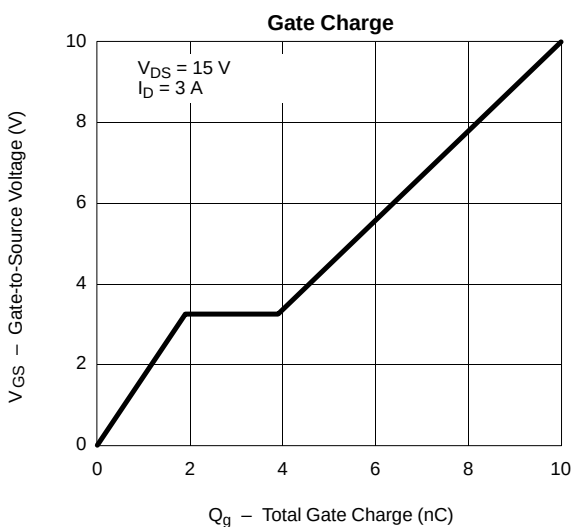
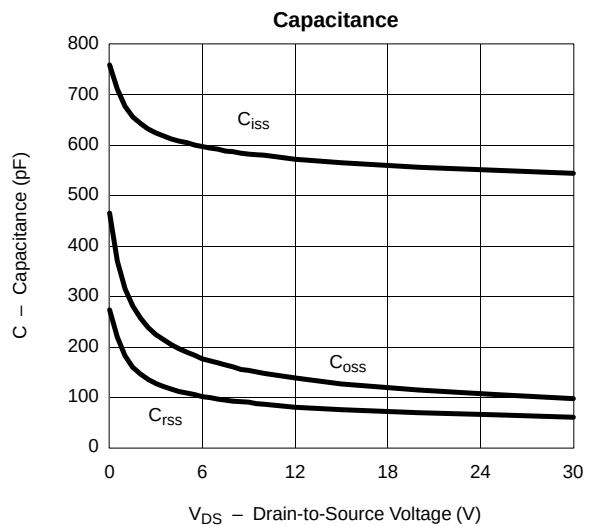
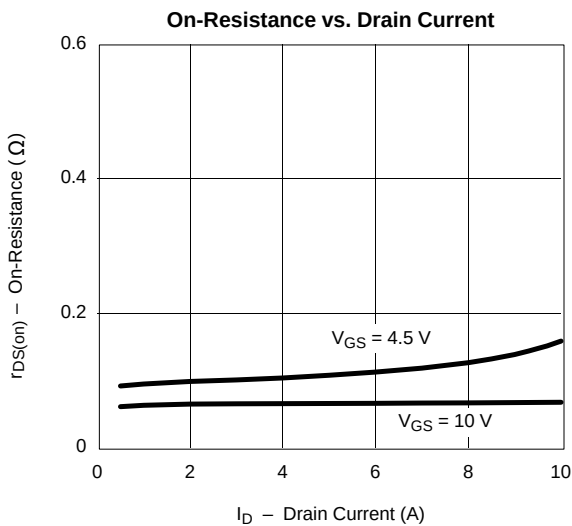
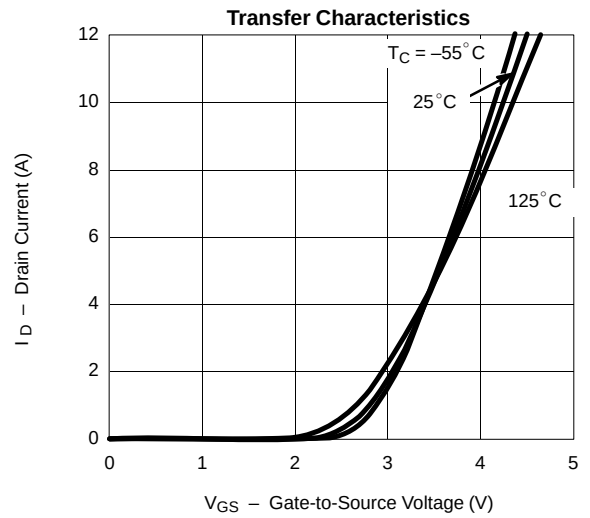
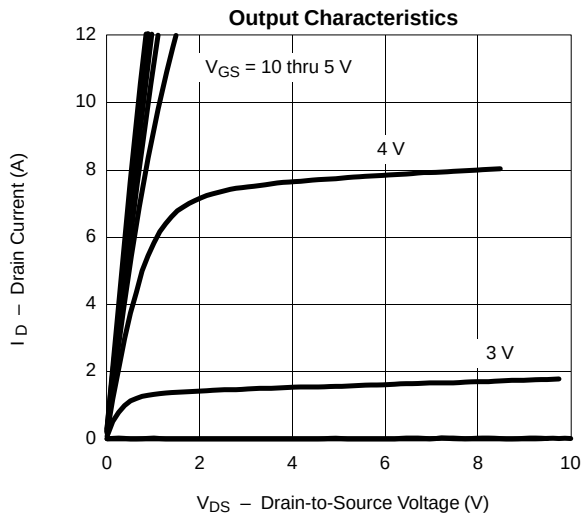
* . Pulse width limited by maximum junction temperature

MOSFET ELECTRICAL CHARACTERISTICS T_a=25 °C unless otherwise specified

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	VDSS	VGS = 0 V, ID = -10 iA	-30			V
Zero Gate Voltage Drain Current	IDSS	VDS = -24 V, VGS = 0 V			-1	μA
		VDS = -24 V, VGS = 0 V, T _J = 55 °C			-10	
Gate-Body Leakage	IGSS	VDS = 0 V, VGS = ±20 V			±100	nA
Gate Threshold Voltage	VGS(th)	VDS = VGS, ID = -250 iA	-1.0			V
Drain-Source On-State Resistance *	RDS(on)	VGS = -10 V, ID = -3 A		0.064	0.080	Ω
		VGS = -4.5 V, ID = -2.5 A		0.103	0.140	
On-State Drain Current	ID(on)	VDS ≤ -5 V, VGS = -10 V	-6			A
Forward Transconductance *	gfs	VDS = -10 V, ID = -3 A		4.5		S
Input Capacitance	Ciss	VDS = -15 V, VGS = 0, f = 1 MHz		565		pF
Output Capacitance	Coss			126		
Reverse Transfer Capacitance	Crss			75		
Total Gate Charge	Qg	VDS = -15V ,VGS = -10 V , ID= -3A		10	15	nC
Gate-Source Charge	Qgs			1.9		
Gate-Drain Charge	Qgd			2		
Turn-On Time	td(on)	VDD=-15V,RL=15Ω,ID=-1A,VGEN=-10V,RG=6Ω		10	20	ns
	tr			9	2	
Turn-Off Time	td(off)			27	90	
	tf			7	1	
Continuous Source Current (diode conduction)	IS			-1.25	6	A
Diode Forward Voltage *	VSD	IS = -1.25 A, VGS = 0 V			-1.2	V

* Pulse test: PW≤300is duty cycle≤2%.

RATINGS AND CHARACTERISTIC CURVES



RATINGS AND CHARACTERISTIC CURVES

