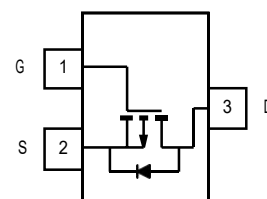
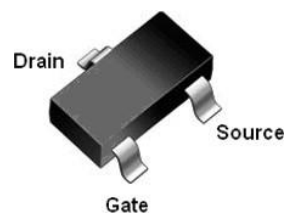


P-Channel Enhancement MOSFET

■ Features

- $V_{DS} (V) = -40V$
- $I_D = -5.0A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 66m\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 126m\Omega$ ($V_{GS} = -4.5V$)



SOT23-3

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

Parameter	Symbol	5 sec	Steady State	Unit
Drain-Source Voltage	V _{DS}	-40		V
Gate-Source Voltage	V _{GS}	± 20		
Continuous Drain Current *1 Ta = 25℃	I _D	-5.0	-2.3	A

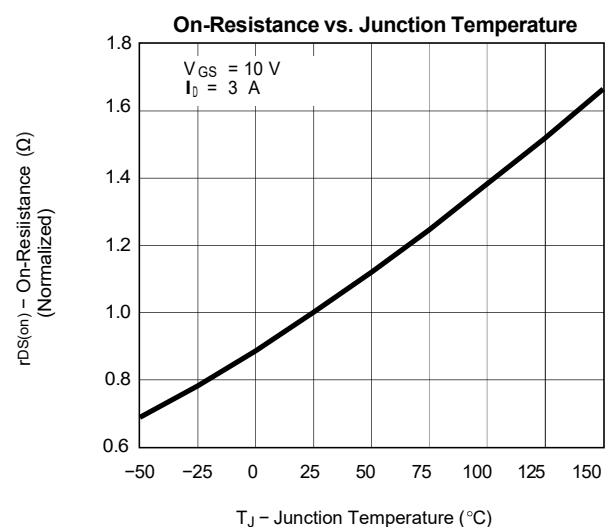
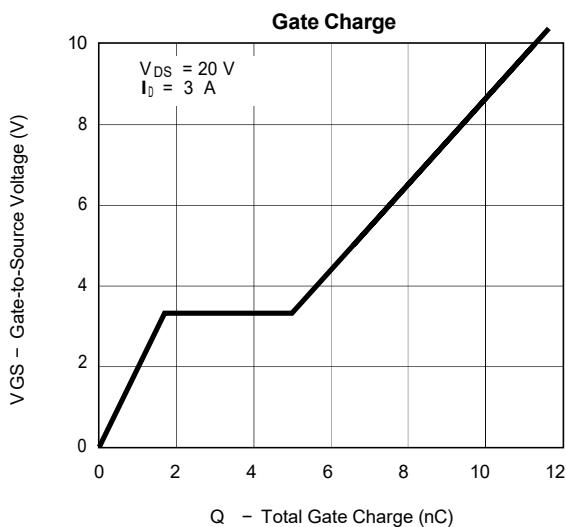
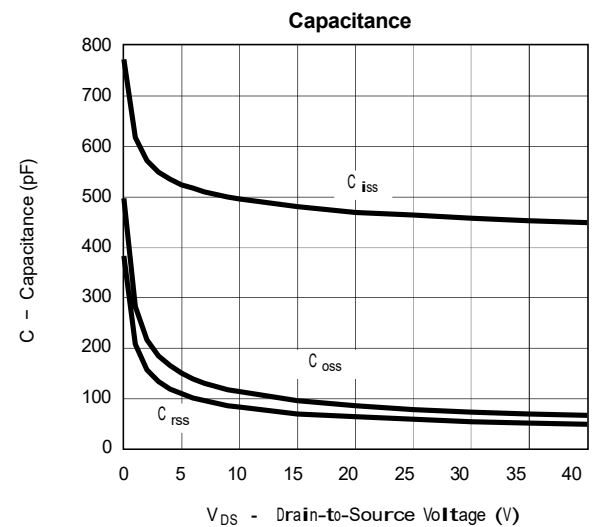
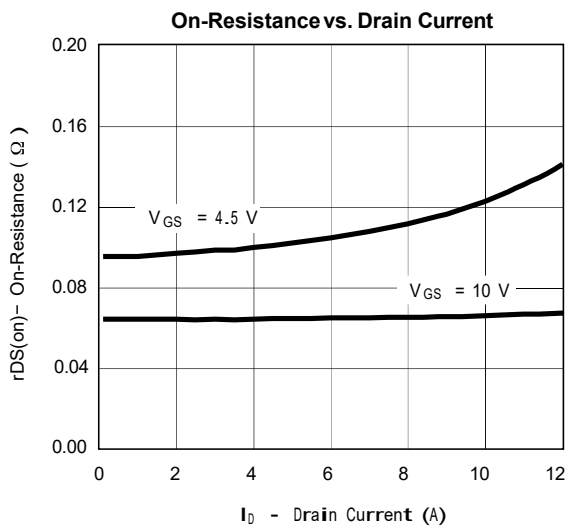
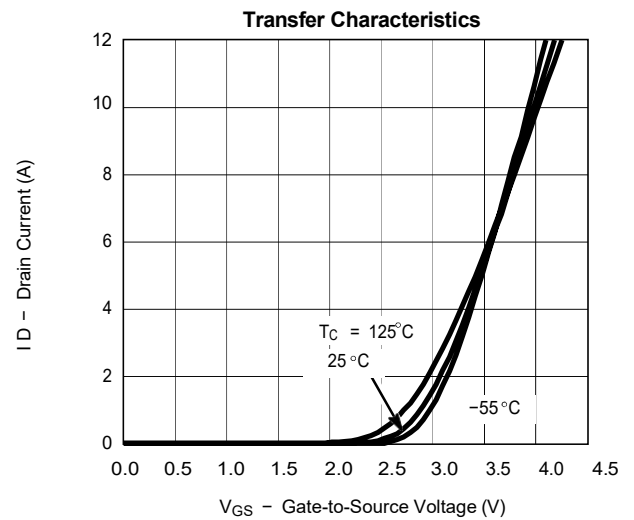
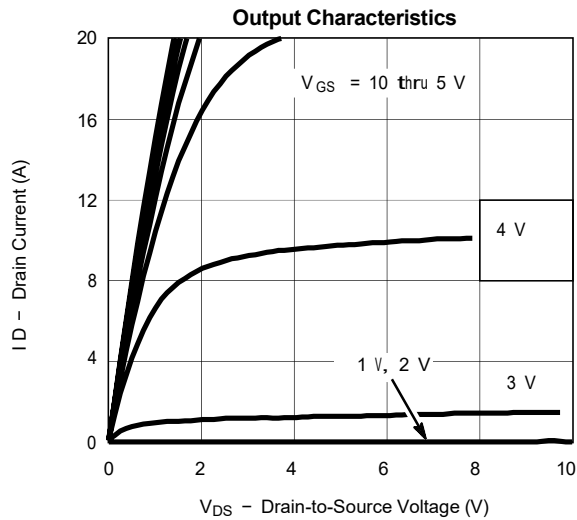
P-Channel Enhancement MOSFET

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	VDSS	ID=-250 μ A, VGS=0V	-40			V
Zero Gate Voltage Drain Current	IDSS	VDS=-40V, VGS=0V			-1	μ A
		VDS=-40V, VGS=0V, TJ=55°C			-10	
Gate-Body leakage current	IGSS	VDS=0V, VGS= $\pm$ 20V			$\pm$ 100	nA
Gate Threshold Voltage	VGS(th)	VDS=VGS ID=-250 μ A	-1		-3	V
Static Drain-Source On-Resistance *1	RDS(on)	VGS=-10V, ID=-3.0A		66	78	m Ω
		VGS=-4.5V, ID=-2.4A		96	126	
On state drain current *1	ID(on)	VGS=-10V, VDS=-5V	-6			A
Forward Transconductance *1	gFS	VDS=-5V, ID=-3.0A		7		S
Input Capacitance	Ciss	VGS=0V, VDS=-20V, f=1MHz		470		pF
Output Capacitance	Coss			85		
Reverse Transfer Capacitance	Crss			65		
Total Gate Charge	Qg	VGS=-10V, VDS=-20V, ID=-3A		11.3	17	nC
Gate Source Charge	Qgs			1.7		
Gate Drain Charge	Qgd			3.3		
Turn-On DelayTime	td(on)	VGS=-4.5V, VDS=-20V, RL=20 Ω , RGEN=6 Ω ID=-1.0A		7	15	ns
Turn-On Rise Time	tr			15	25	
Turn-Off DelayTime	td(off)			25	40	
Turn-Off Fall Time	tf			25	40	
Maximum Body-Diode Continuous Current	IS				-1.25	A
Diode Forward Voltage	VSD	IS=-1.25 A, VGS=0V		-0.8	-1.2	V

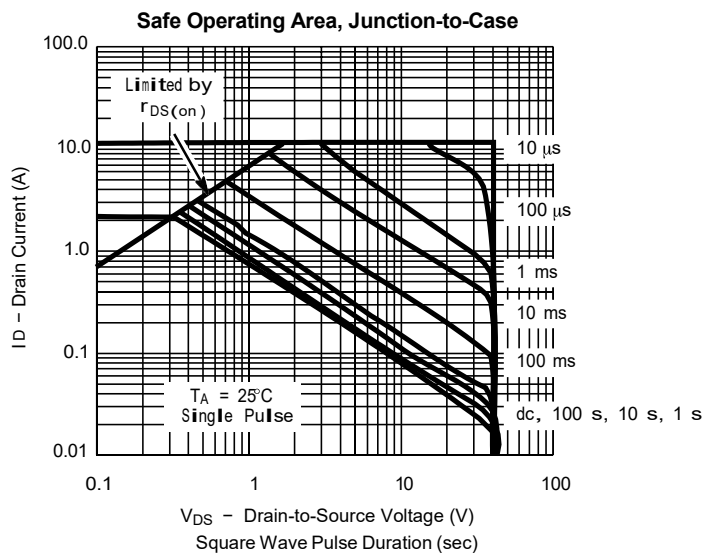
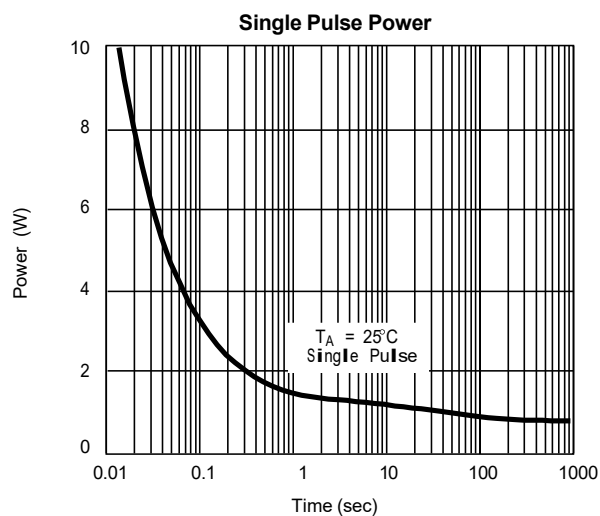
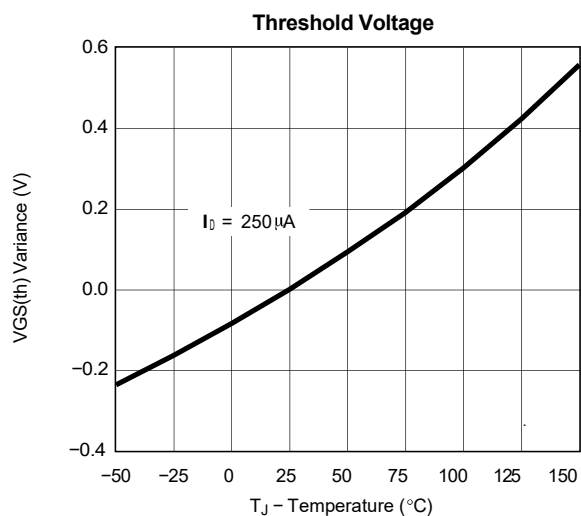
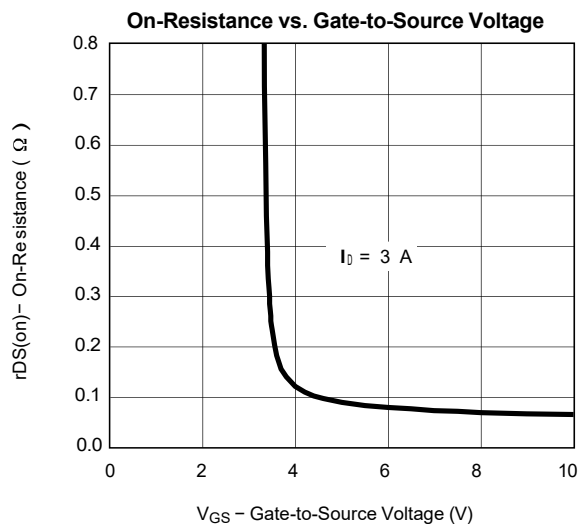
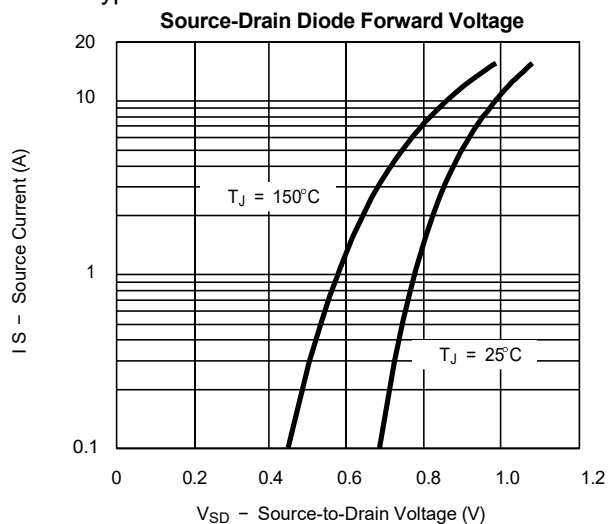
P-Channel Enhancement MOSFET

■ Typical Characteristics

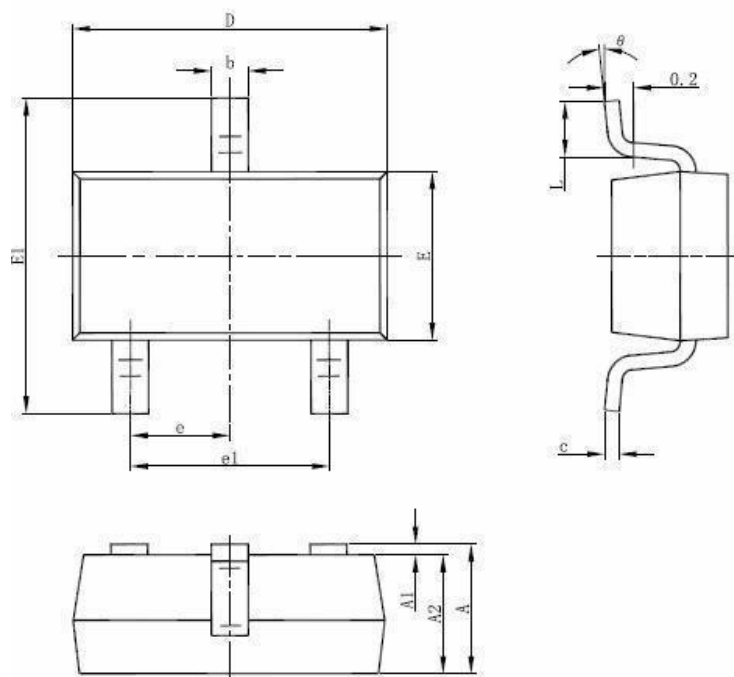


P-Channel Enhancement MOSFET

■ Typical Characteristics



SOT23-3 Mechanical Data



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°