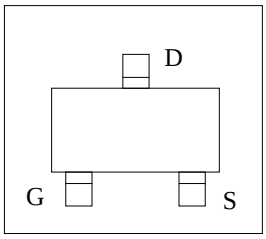
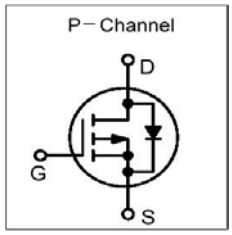
-30V/-4.1A P-Channel MOSFET

BVDSS	-30	V
ID	-4.1	A
RDSON@VGS=-10V	48	mΩ
RDSON@VGS=-4.5V	64	mΩ

SOT-23





Features

Advanced trench process technology

High Density Cell Design For Ultra Low On-Resistance

Order Information

Product	Package	Marking	Packing
A03407	SOT-23	A7SHB	3000PCS/Reel

Maximum Ratings and Thermal Characteristics (TA = 25oC unless otherwise noted)

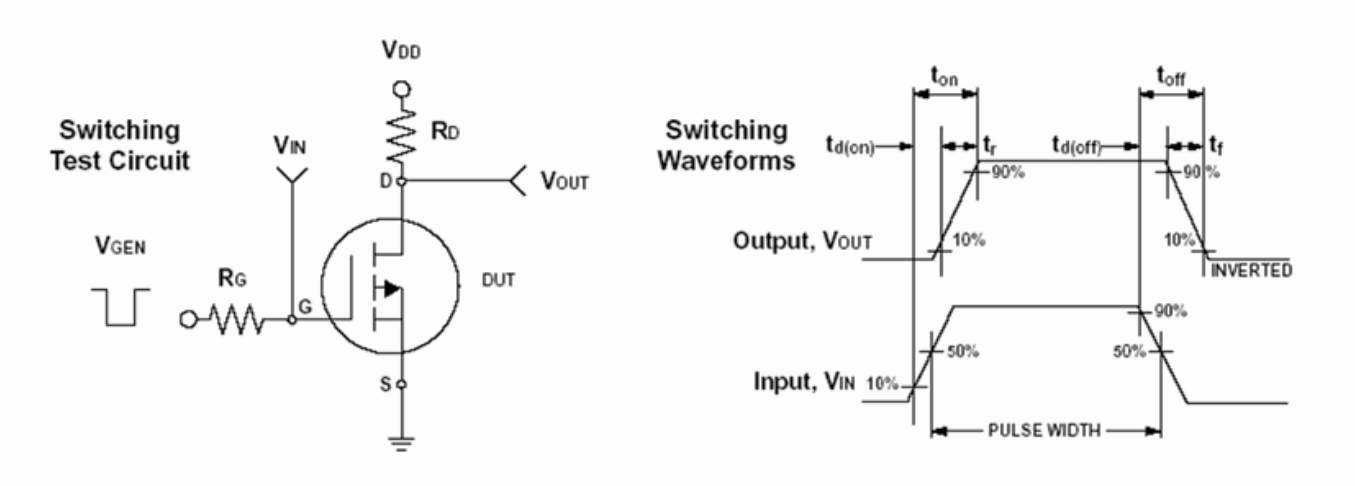
Parameter		Symbol	Limit	Unit
Drain-Source Voltage		V_{DS}	-30	V
Gate-Source Voltage		V_{GS}	±20	
Continuous Drain Current		I_D	-4.1	A
Pulsed Drain Current		I_{DM}	-20	
Maximum Power Dissipation	TA = 25°C	P_D	1.4	W
	TA = 75°C		1	
Operating Junction and Storage Temperature Range		T_J, T_{stg}	-55 to 150	°C
Junction-to-Ambient Thermal Resistance (PCB mounted)		$R_{\theta JA}$	125	°C/W

-30V/-4.1A P-Channel MOSFET

ELECTRICAL CHARACTERISTICS (TA = 25oC unless otherwise noted)

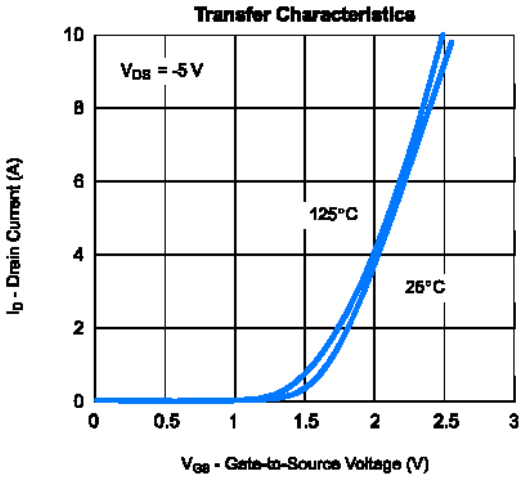
Parameter	Symbol	Test Condition	Min.	Typ.	Miax.	Unit
Static						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} = 0V, I_D = -250uA	-30			V
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} = -10V, I_D = -4.1A		48.0	80	mΩ
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} = -4.5V, I_D = -3A		64.0	110	
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D = -250uA	-1.0	-1.5	-3.0	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} = -24V, V_{GS} = 0V			-1	uA
Gate Body Leakage	I_{GSS}	V_{GS} = ±20V, V_{DS} = 0V			±100	nA
Forward Transconductance	g_{fs}	V_{DS} = -5V, I_D = -4 A	5.5			S
Dynamic						
Total Gate Charge	Q_g	V_{DS} = -15V , I_D =-4.1A V_{GS} = -10V		9.35		nC
Gate-Source Charge	Q_{gs}			3.43		
Gate-Drain Charge	Q_{gd}			1.7		
Turn-On Delay Time	$t_{d(on)}$	V_{DD} =-15V, RL=15Ω I_D = -1A, V_{GEN} = -10V R_G = 6Ω		10.8		ns
Turn-On Rise Time	t_r			2.33		
Turn-Off Delay Time	$t_{d(off)}$			22.53		
Turn-Off Fall Time	t_f			3.87		
Input Capacitance	C_{iss}	V_{DS} = -15V, V_{GS} = 0V f = 1.0 MHz		551.57		pF
Output Capacitance	C_{oss}			90.96		
Reverse Transfer Capacitance	C_{rss}			60.79		
Source-Drain Diode						
Max. Diode Forward Current	I_S				-2.6	A
Diode Forward Voltage	V_{SD}	I_S = 2.6A, V_{GS} = 0V			-1.3	V

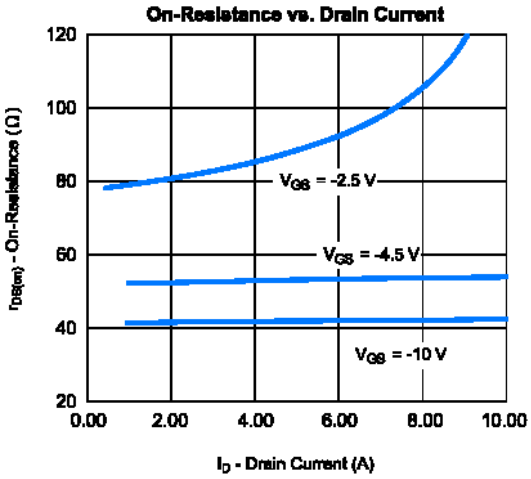
Note: Pulse test: pulse width <= 300us, duty cycle<= 2%

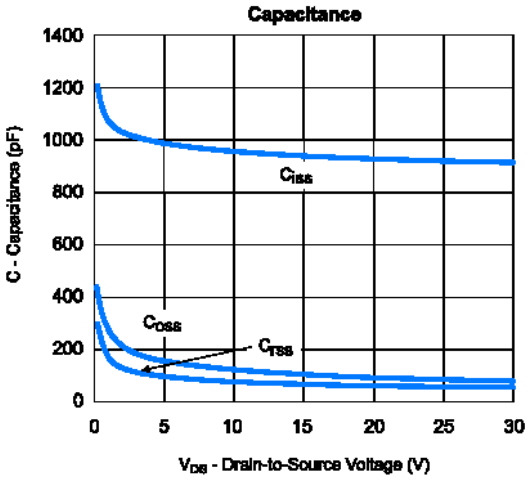


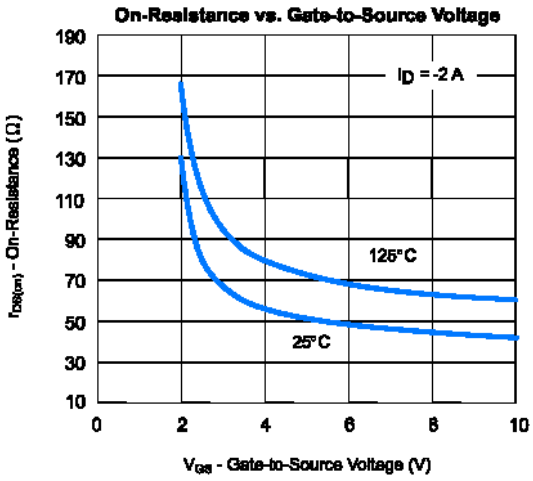
-30V/-4.1A P-Channel MOSFET

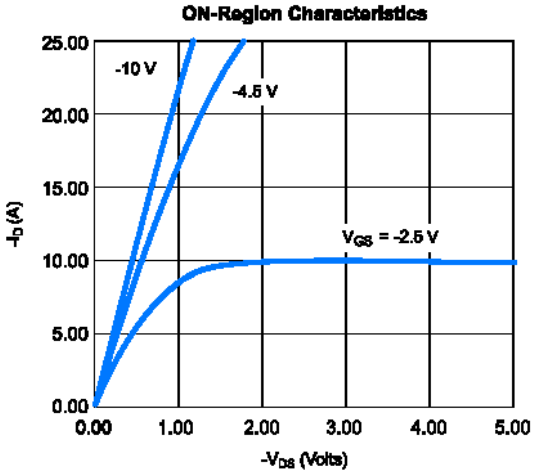
Typical Characteristics (T_J =25℃ Noted)



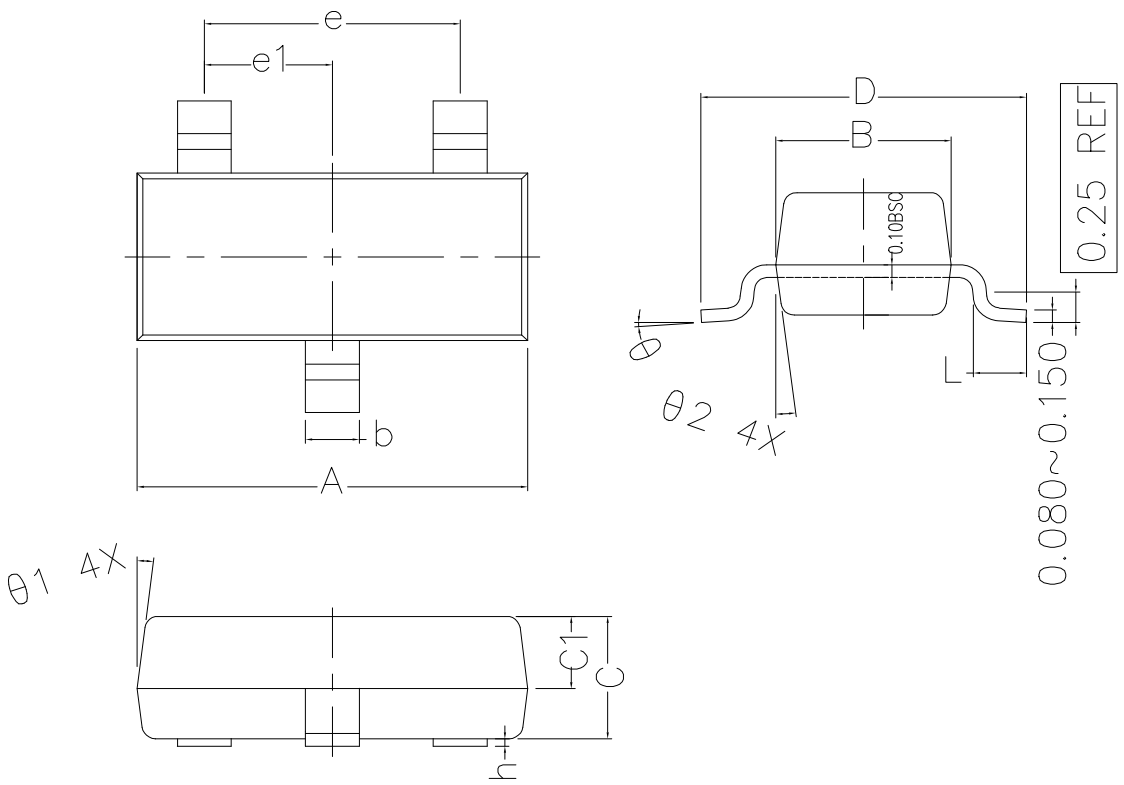








-30V/-4.1A P-Channel MOSFET



COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	2.800	2.900	3.000
B	1.200	1.300	1.400
C	0.900	1.000	1.100
C1	0.500	0.550	0.600
D	2.250	2.400	2.550
L	0.300	0.400	0.500
h	0.010	0.050	0.100
b	0.300	0.400	0.500
e	1.90 TYPE		
e1	0.95 TYPE		
θ_1	7° TYPE		
θ_2	7° TYPE		
θ	0° ~ 7°		