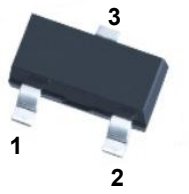
描述 / Descriptions

SOT-23 塑封封装 N 沟道 MOS 场效应管。
N- CHANNEL MOSFET in a SOT-23 Plastic Package.



PIN1：G

PIN 2：S

PIN 3：D

特征 / Features

芯片采用超高密度圆胞设计技术，$R_{DS(ON)}$导通电阻小，SOT-23 封装。
Super high dense cell design for low $R_{DS(ON)}$,SOT-23 package.

用途 / Applications

电池管理，高速开关，低功率 DC-DC 转换。
Battery management,High speed switch,low power DC to DC converter.

印章代码 / Marking

Marking	A2SHB

极限参数 / Absolute Maximum Ratings(Ta=25℃)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Drain-Source Voltage	V_{DSS}	20	V
Gate-Source Voltage	V_{GSS}	±8	V
Drain Current – Continuous	I_D	3.0	A
Pulsed Drain Current	I_{DM}	10	A
Continuous Source Current	I_S	0.95	A
Power Dissipation	P_D	0.9	W
Storage Temperature Range	T_{stg}	-55～150	℃

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电性能参数 / Electrical Characteristics(Ta=25℃)

参数 Parameter	符号 Symbol	测试条件 Test Conditions		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Drain–Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS}=0	I_D=10μA	20			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{GS}=0	V_{DS}=20V			1.0	μA
Gate–Body Leakage.	I_{GSS}	V_{GS}=±8V	V_{DS}=0V			±100	nA
Static Drain–Source On–Resistance	$R_{DS(on)1}$	V_{GS}=4.5V	I_D=3.6A			60	mΩ
	$R_{DS(on)2}$	V_{GS}=2.5V	I_D=3.1A			115	mΩ
Forward Transconductance	g_{FS}	V_{DS}=5V	I_D=3.6A		8		S
Drain–Source Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_D=1.25A		0.75	1.2	V
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=50μA	0.50		1.0	V
State Drain Current	$I_{D(on)}$	V_{DS}=5V	V_{GS}=2.5V	4			A
Turn–On Delay Time	$t_{d(on)}$	V_{DD}=10V V_{GEN}=4.5V R_{GEN}=6Ω	I_D=3.6A R_L=2.8Ω		7		ns
Turn–On Rise Time	t_r				55		
Turn–Off Delay Time	$t_{d(off)}$				15		
Turn–Off Fall Time	t_f				10		

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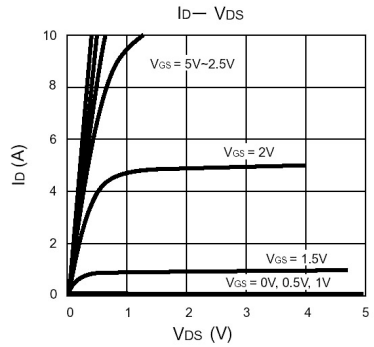
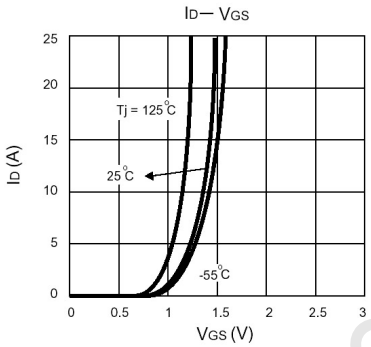
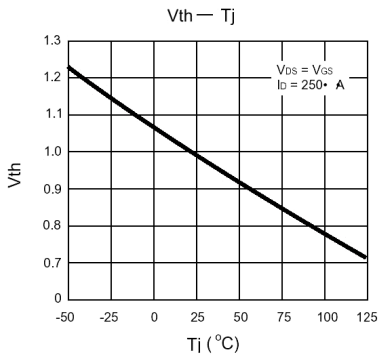
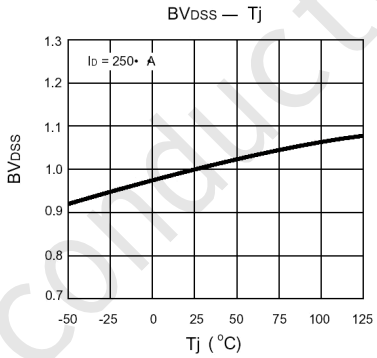
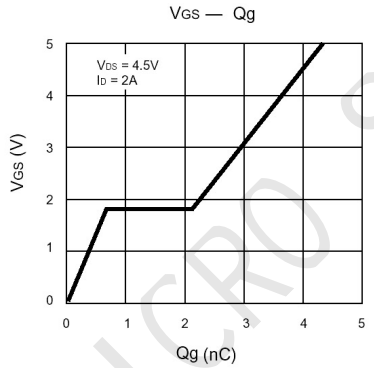
电参数曲线图 / Electrical Characteristic Curve

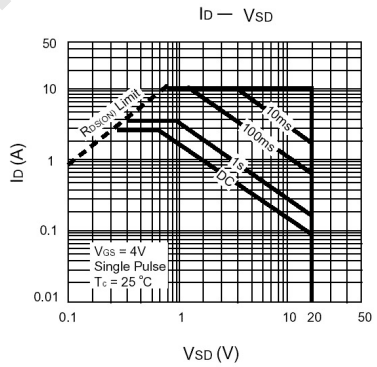


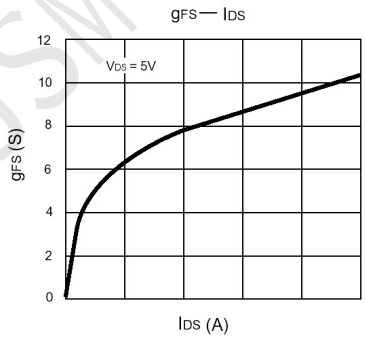


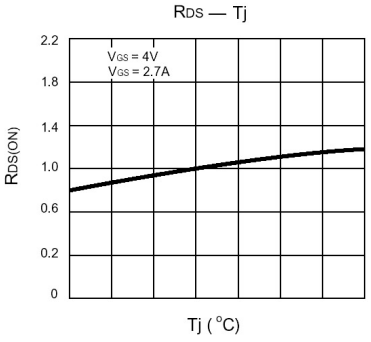












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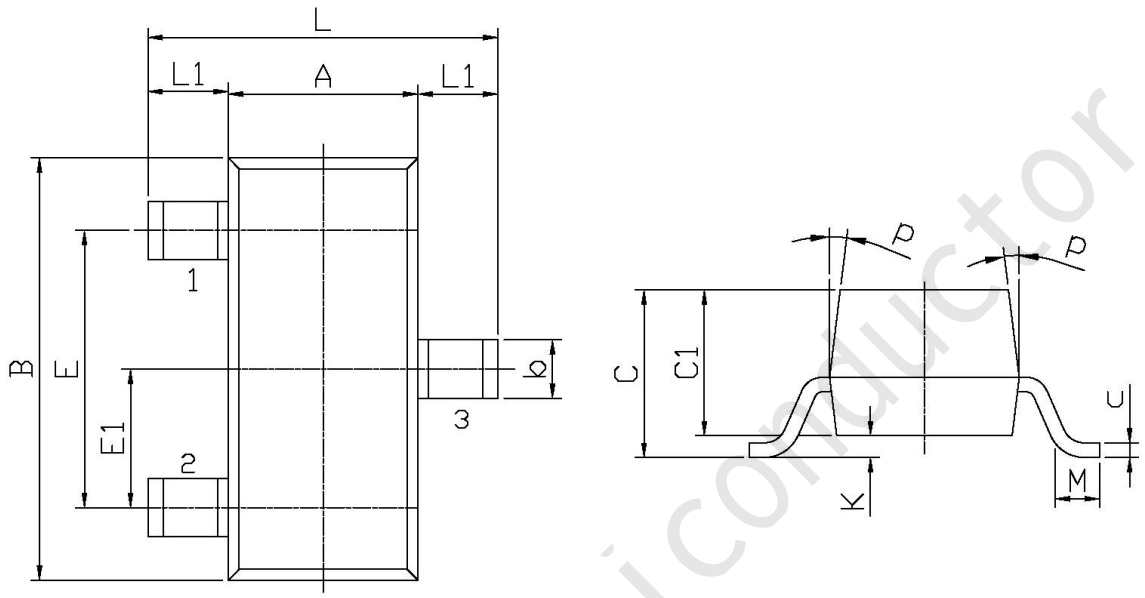
外形尺寸图 / Package Dimensions

SOT-23 单位：mm



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	3.10	K	0	0.10
E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	P	7°	
b	0.35	0.55			

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