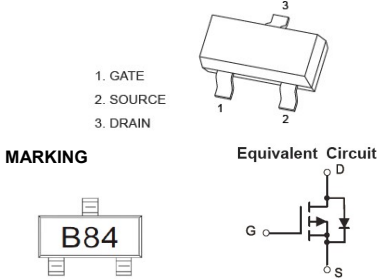




V(BR)DSS	RDS(ON)MAX	ID
-50V	8Ω@-10V	-0.13A
	10Ω@-5V	

SOT-23



特征 Features

- Energy Efficient
- Low Threshold Voltage
- High-speed Switching.
- DC/DC Converter.

机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0.
- 安装位置: 任意 Mounting Position: Any.

极限值和温度特性(TA = 25°C 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Drain-Source Voltage	V _{DS}	-50	V
Gate-Source Voltage	V _{GS}	±20	V
Continuous Drain Current	I _D	-0.13	A
Pulsed Drain Current (tp<10us) (note1)	I _{DM}	-0.52	A
Power Dissipation	P _D	225	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-50-+150	°C
Thermal Resistance From Junction to Ambient (note2)	R _{θJA}	556	°C/W
Maximum Lead Temperature for Soldering Purposes, Duration for 5 Seconds	T _L	260	°C

电特性 (TA = 25°C 除非另有规定)

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Static						
Drain-Source Breakdown Voltage	V(BR)DSS	V _{GS} =0V, I _D =-250uA	-50			V
Gate-Threshold voltage(note3)	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250uA	-0.9	-1.6	-2.0	V
Gate-body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±5	uA
Zero Gate Voltage Drain current	I _{DSS}	V _{DS} =-50V, V _{GS} =0V			-15	uA
		V _{DS} =-25V, V _{GS} =0V			-0.1	
Drain-Source On-Resistance (note3)	R _{DS(ON)}	V _{GS} =-5V, I _D =-0.1A		5.8	10	Ω
		V _{GS} =-10V, I _C =-0.1A		4.5	8	
Forward trans conductance (note1)	g _{fs}	V _{DS} =-25V, I _D =-0.1A	50			mS
Diode forward voltage	V _{SD}	I _S =0.34A, V _{GS} =0V			1.3	V
Dynamic(note4)						
Input capacitance	C _{iss}	V _{DS} =5V, V _{GS} =0V, f=1MHz		30		pF
Output capacitance	C _{oss}			10		
Reverse Transfer capacitance	C _{rss}			5		
Switching(note3,4)						
Turn-on Time	td(on)	V _{DD} =-15V, R _L =50Ω, I _D ≈-0.25A,		2.5		ns
Rise time	tr			1		
Turn-off Time	td(off)			16		
Fall time	tf			8		
SOURCE-DRAIN DIODE CHARACTERISTICS						
Continuous Current	I _S				-0.13	A
Pulsed Current	I _{SM}				-0.52	A
Diode forward Voltage(note 3)	V _{SD}	I _S =-0.13A, V _{GS} =0V			-2.2	V

Notes: 1). Repetitive rating: Pulse width limited by junction temperature.

2). Surface mounted on FR4 board, t≤10s

3). Pulse Test: Pulse Width ≤300us, Duty Cycle≤2%.

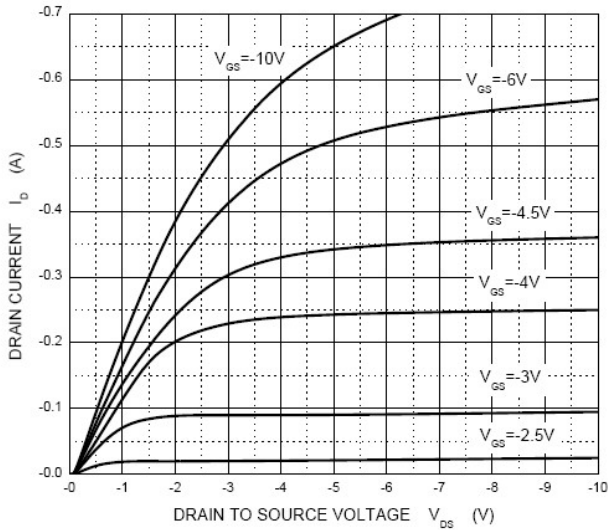
4). Guaranteed by design, not subject to producing.



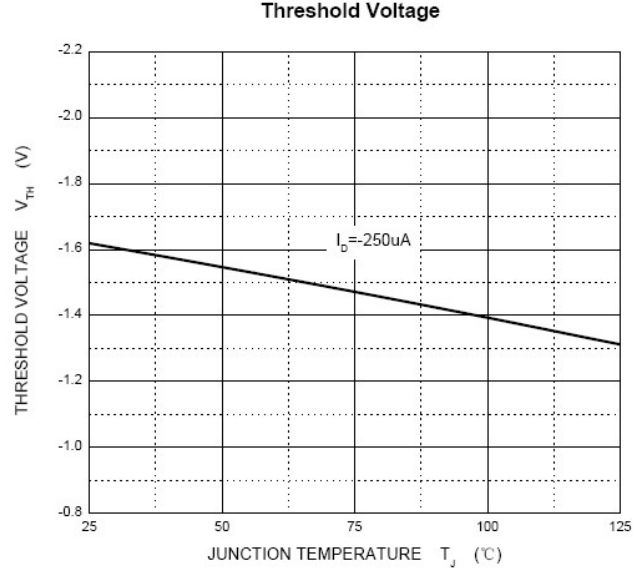
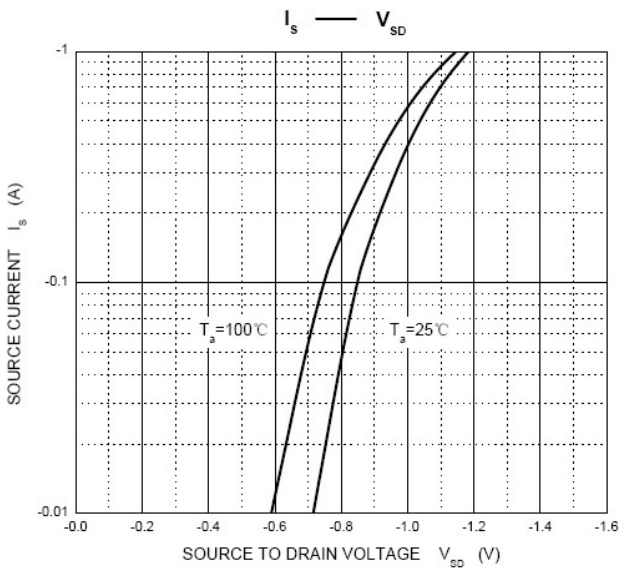
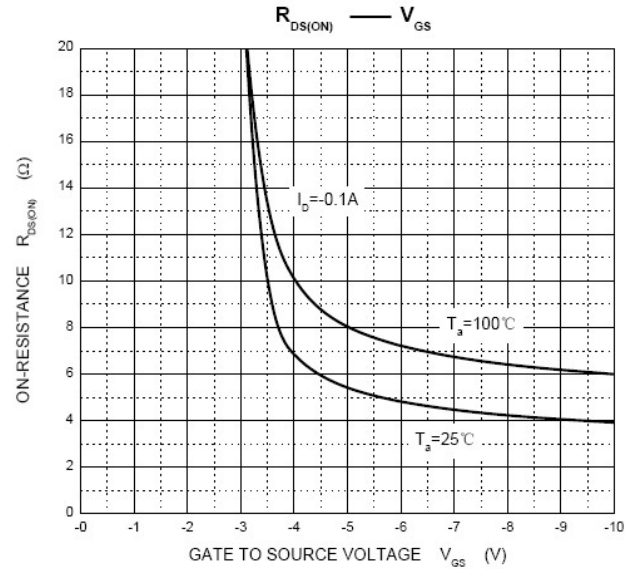
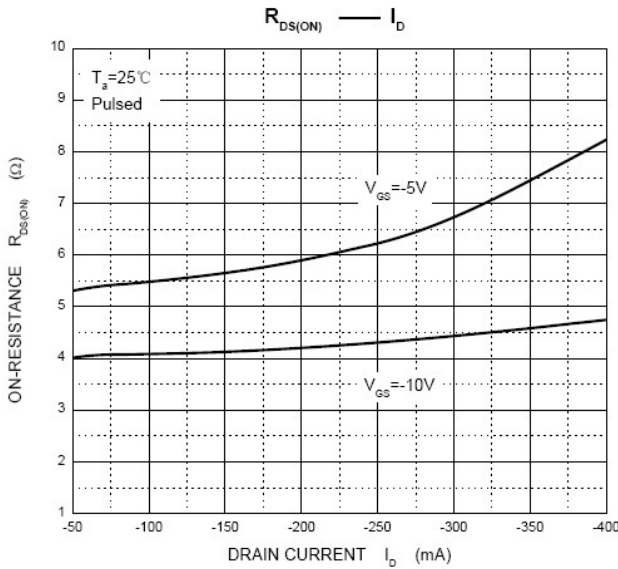
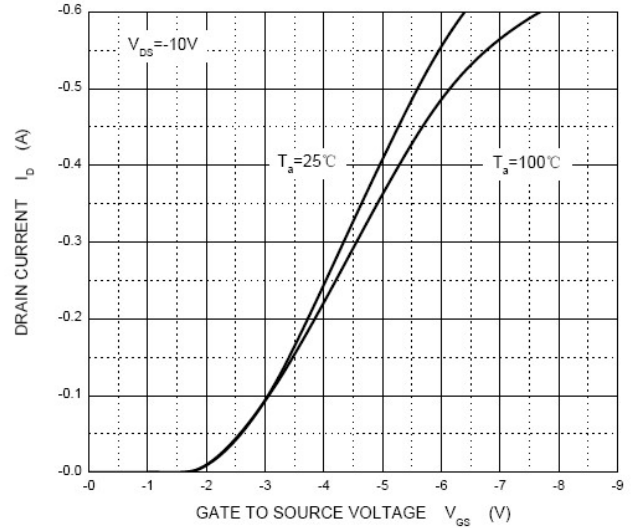


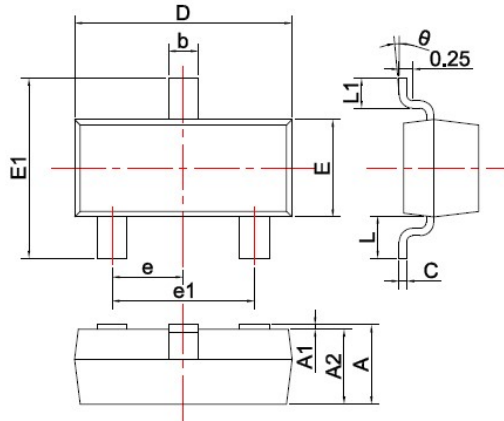
Typical characteristics

Output Characteristics



Transfer Characteristics



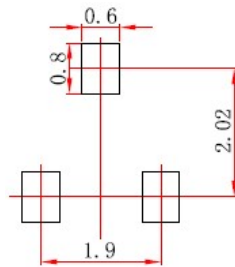
SOT-23 PACKAGE OUTLINE Plastic surface mounted package


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

焊盘设计参考 Precautions: PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs



- Note:
1. Controlling dimension: In millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Juxing Electronic Technology](#) manufacturer:

Other Similar products are found below :

[IRFD120](#) [JANTX2N5237](#) [2SK2267\(Q\)](#) [BUK455-60A/B](#) [TK100A10N1,S4X\(S](#) [MIC4420CM-TR](#) [VN1206L](#) [NDP4060](#) [SI4482DY](#)
[IRS2092STRPBF-EL](#) [IPS70R2K0CEAKMA1](#) [SQM120N06-3M5L-GE3](#) [TK31J60W5,S1VQ\(O](#) [TK31J60W,S1VQ\(O](#) [TK16J60W,S1VQ\(O](#)
[2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [P85W28HP2F-7071](#) [NTE2384](#) [DMC2700UDMQ-7](#) [DMN2080UCB4-7](#)
[DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#)
[STF5N65M6](#) [IRF40H233XTMA1](#) [STU5N65M6](#) [DMN6022SSD-13](#) [DMN13M9UCA6-7](#) [DMTH10H4M6SPS-13](#) [IPS60R360PFD7SAKMA1](#)
[DMN2990UFB-7B](#) [SSM3K35CT,L3F](#) [IPLK60R1K0PFD7ATMA1](#) [2N7002W-G](#) [MCAC30N06Y-TP](#) [IPWS65R035CFD7AXKSA1](#)
[MCQ7328-TP](#) [SSM3J143TU,LXHF](#) [PJMF280N65E1_T0_00201](#) [PJMF380N65E1_T0_00201](#) [PJMF280N60E1_T0_00201](#)
[PJMF600N65E1_T0_00201](#) [PJMF900N65E1_T0_00201](#) [PJMF900N60E1_T0_00201](#)