

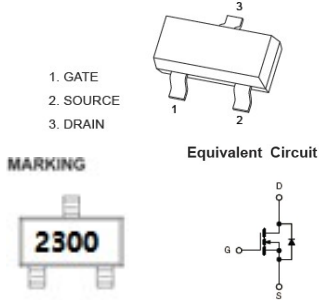


JX2300

N-Channel Enhancement Mode Power MOSFET

V(BR)DSS	RDS(ON)MAX	ID
20V	25mΩ@4.5V	4.5A
	32mΩ@2.5V	

SOT-23



特征 Features

- TrenchFET Power MOSFET
- Load Switch for Portable Devices.
- 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}	20	V
Gate-Source Voltage	V _{GS}	±10	V
Continuous Drain Current	I _D	4.5	A
Power Dissipation	P _D	400	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-50-+150	°C
Thermal Resistance From Junction to Ambient	R _{θJA}	100	°C/W

Note: The R_{θJA} is the sum of the thermal resistance from junction to ambient and depend on package type

电特性 (TA = 25°C 除非另有规定)

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

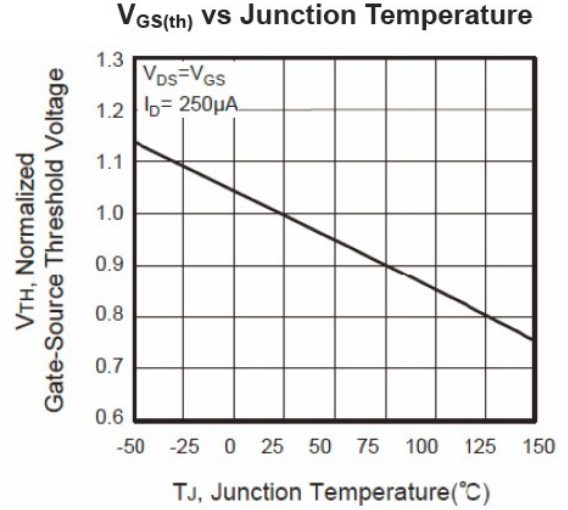
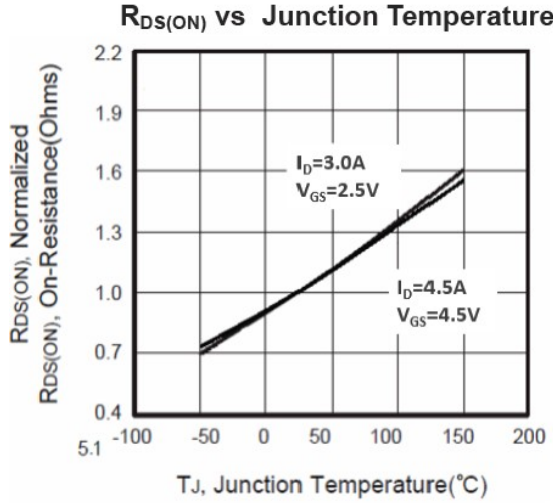
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Static						
Drain-Source Breakdown Voltage	V(BR)DSS	V _{GS} =0V, I _D =10uA	20			V
Gate-Threshold voltage*	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250uA	0.45	0.62	1.0	V
Gate-body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±10V			±100	nA
Zero Gate Voltage Drain current	I _{DSS}	V _{DS} =16V, V _{GS} =0V			1	uA
Drain-Source On-Resistance (a)	RDS(ON)	V _{GS} =4.5V, I _D =4.5A		19.5	25	mΩ
		V _{GS} =2.5V, I _C =3.0A		25	32	
		V _{GS} =1.8V, I _C =2.7A		33	49	
Forward trans conductance (a)	g _{fs}	V _{DS} =5V, I _D =3.6A		8		S
Diode forward voltage	VSD	I _S =1A, V _{GS} =0V		0.7	1.3	V

Notes: a. Pulse Test: Pulse Width ≤300us, Duty Cycle≤2%.

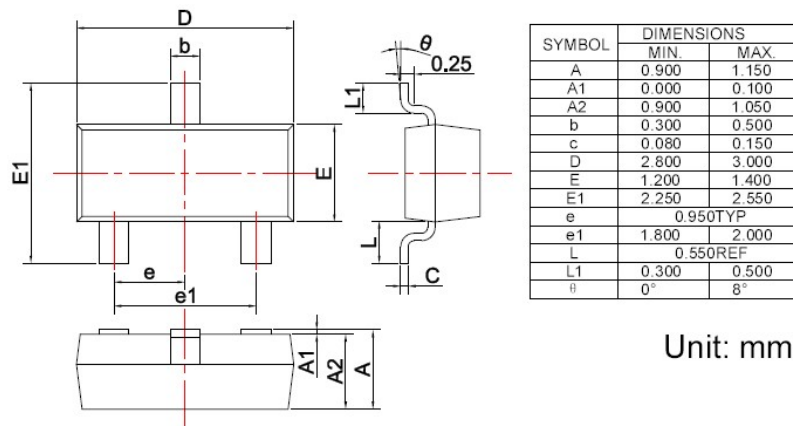
b. These parameters have no way to verify.



Typical characteristics

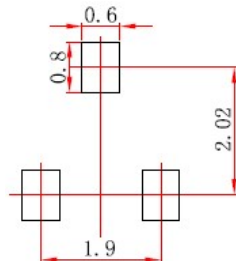


SOT-23 PACKAGE OUTLINE Plastic surface mounted package



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.