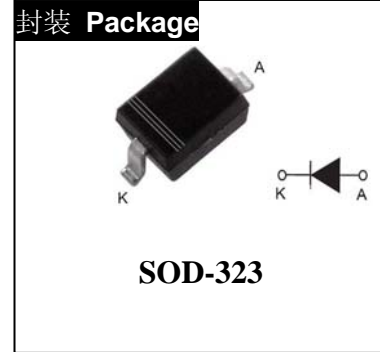




# 1N4148WS

## 主要参数 MAIN CHARACTERISTICS

$I_{F(AV)}$	150mA
$V_{RRM}$	75V
$T_j$	150°C
$V_{F(max)}$	1.25V



## 产品特性

- 快速开关速度
- 表面贴装，适用于自动插件
- 用于开关应用
- 高传导性

## FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance

## 订货信息 ORDER MESSAGE

订货型号 Order codes	印记 Marking	封装 Package	无卤素 Halogen Free	包装 Packaging	器件重量 Device Weight
1N4148WS-O3-A-O	T4	SOD-323	否 NO	卷盘 Reel	8mg(approx.)
1N4148WS-O3-A-R	T4	SOD-323	是 YES	卷盘 Reel	8mg(approx.)



绝对最大额定值 ABSOLUTE RATINGS ( $T_A=25^{\circ}\text{C}$ )

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
最大反向重复峰值电压 Maximum Repetitive Reverse Voltage	$V_{RRM}$	75	V
平均整流输出电流 Average Rectified Output Current	$I_{O(AV)}$	150	mA
非重复峰值正向浪涌电流 Non-repetitive Peak Forward Surge Current at $t = 1 \mu\text{s}$	$I_{FSM}$	2	A
耗散功率 Power Dissipation	$P_D$	400	mW
最高结温 Maximum Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
储存温度 Storage Temperature Range	$T_{STG}$	-65~+150	$^{\circ}\text{C}$

## 电特性 ELECTRICAL CHARACTERISTICS

项 目 Parameter	符 号 Symbol	最 小 Min	最 大 Min	单 位 Unit
最大反向电流 Maximum Reverse Current at $V_R = 75 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}, T_J = 150^{\circ}\text{C}$ at $V_R = 25 \text{ V}, T_J = 150^{\circ}\text{C}$	$I_R$	- - - -	1 25 50 30	$\mu\text{A}$ nA $\mu\text{A}$ $\mu\text{A}$
最大正向电压 Maximum Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	- - - -	0.715 0.855 1.0 1.25	V
反向恢复时间 Reverse Recovery Time at $I_{rr} = 0.1 \times I_R, I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega$	trr	-	4	ns
结电容 Typical Junction Capacitance $V_R = 4.0 \text{ V}, f = 1.0 \text{ MHz}$	$C_J$	-	2	pF

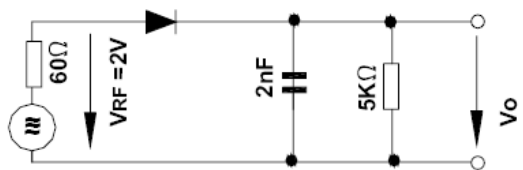
## 热特性 THERMAL CHARACTERISTICS

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
结到环境的热阻 Thermal Resistance Junction to Ambient	$R_{\theta JA}$	620	$^{\circ}\text{C/W}$

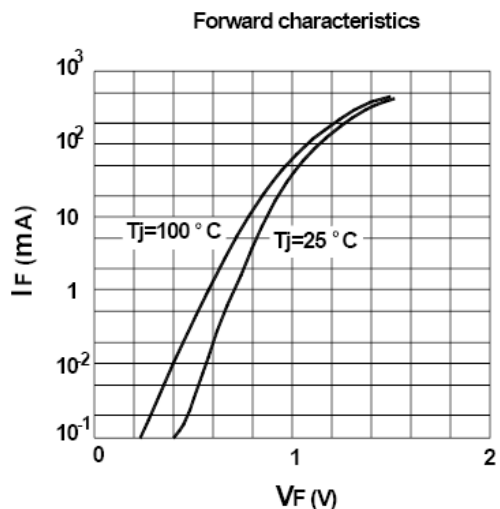




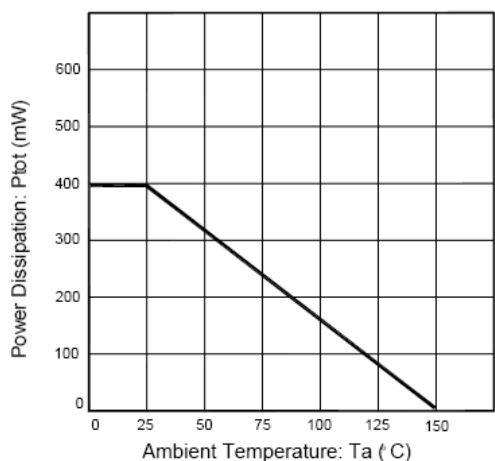
特征曲线 ELECTRICAL CHARACTERISTICS (curves)



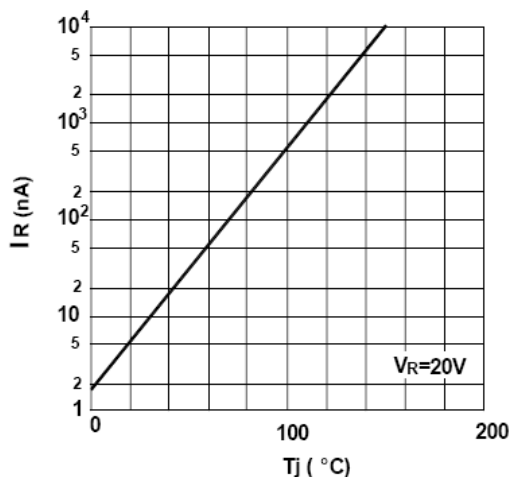
Rectification Efficiency Measurement Circuit



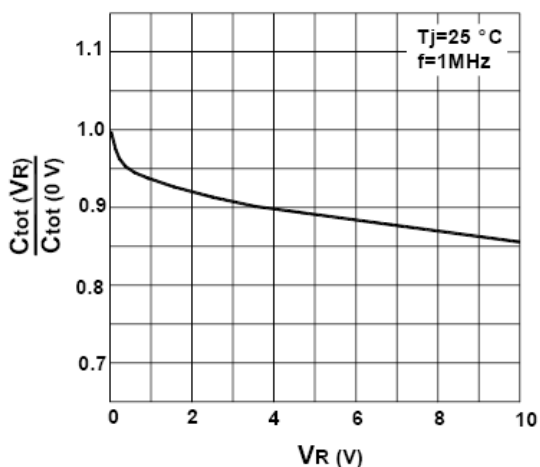
Power Dissipation vs Ambient Temperature



Leakage current vs. junction temperature



Reverse capacitance vs. reverse voltage

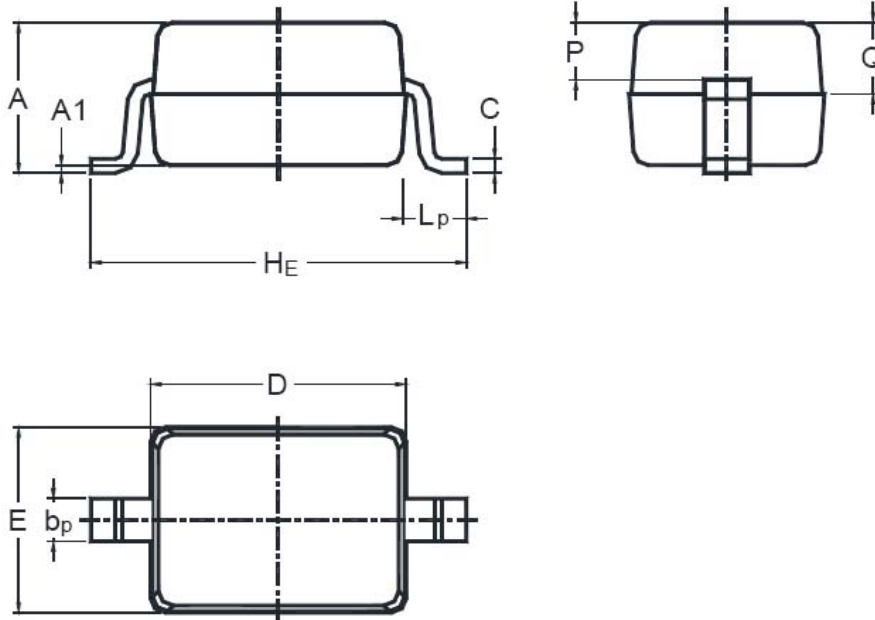




外形尺寸 PACKAGE MECHANICAL DATA

**SOD-323**

Dimensions in inches and(millimeters)



UNIT	A	A <sub>1</sub>	b <sub>p</sub>	C	D	E	H <sub>E</sub>	L <sub>p</sub>	Q	P
mm	1.1 0.8	0.1 0	0.4 0.25	0.18 0.09	1.8 1.6	1.35 1.15	2.8 2.3	0.5 0.1	0.5 0.3	0.4 0.3





**注意事项**

- 1.吉林华微电子股份有限公司的产品销售分为直销和销售代理，无论哪种方式，订货时请与公司核实。
- 2.购买时请认清公司商标，如有疑问请与公司本部联系。
- 3.在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
- 4.本说明书如有版本变更不另外告知

**NOTE**

1. Jilin Sino-microelectronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

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附录（Appendix）：修订记录（Revision History）

日期 Date	旧版本 Last Rev.	新版本 New Rev.	修订内容 Description of Changes

