

# 产品规格书

批准	审核	校核	编制
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2018.02.09	2018.02.09	2018.02.09	2018.02.09

规格书更改履历:

序号	更改内容	履历号	更改时间	责任人
1	新规制定	000	2016.07.28	郑羿
2	增加封页	001	2018.02.09	郑羿

## Descriptions 描述

- Switching application 开关应用程序
- Interface circuit and driver circuit application  
接口电路和驱动电路的应用

## Features 特点

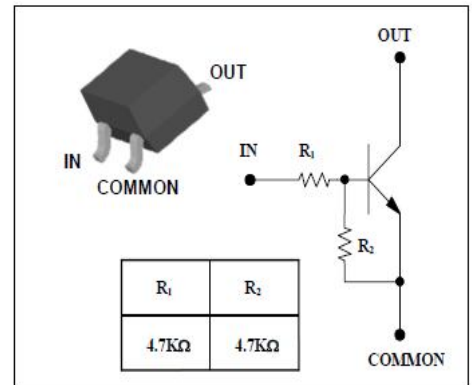
- With built-in bias resistors 内置偏置电阻
- Simplify circuit design 简化电路设计
- Reduce a quantity of parts and Manufacturing process 减少零部件和制造过程的数量
- High packing density 高密度封装

## Ordering Information 订购信息

Type NO.	Marking	Package Code
KRC1201S	RC1 □ • ① ②	SOT-23

① Device Code 型号 ② Year & Week Code 年&周别 • Dalian 大连

## PIN Connection



## Absolute Maximum Ratings 绝对最大额定参数

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Output voltage	V <sub>o</sub>	50	V
Input voltage	V <sub>I</sub>	20,-10	V
Output current	I <sub>o</sub>	100	mA
Power dissipation	P <sub>D</sub>	200	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-50~150	°C

## Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output cut-off current 输出限流电流	I <sub>O(OFF)</sub>	V <sub>o</sub> =50V, V <sub>I</sub> =0	-	-	500	nA
DC current gain 直流放大系数	G <sub>I</sub>	V <sub>o</sub> =5V, I <sub>o</sub> =10mA	30	55	-	-
Output voltage 输出电压	V <sub>O(ON)</sub>	I <sub>o</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	V
Input voltage (ON) 输入电压	V <sub>I(ON)</sub>	V <sub>o</sub> =0.2V, I <sub>o</sub> =5mA	-	1.5	2.0	V
Input voltage (OFF) 输入电压	V <sub>I(OFF)</sub>	V <sub>o</sub> =5V, I <sub>o</sub> =0.1mA	1.0	1.2	-	V
Transition frequency 转移频率	f <sub>T</sub> *	V <sub>o</sub> =10V, I <sub>o</sub> =5mA, f=1MHz	-	200	-	MHz
Input current 输入电流	I <sub>I</sub>	V <sub>I</sub> =5V, I <sub>o</sub> =0	-	-	1.8	mA
Input resistor (Input to base) 输入电阻(输入到基极)	R <sub>1</sub>	-	3.3	4.7	6.1	KΩ
Input resistor (Base to common) 输入电阻(基极到共同端)	R <sub>2</sub>	-	3.3	4.7	6.1	KΩ

\* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1  $P_D - T_a$

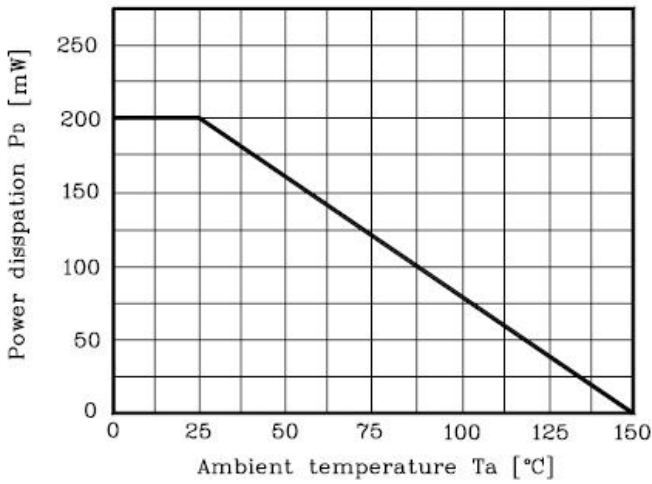


Fig. 2  $I_O - V_{I(ON)}$

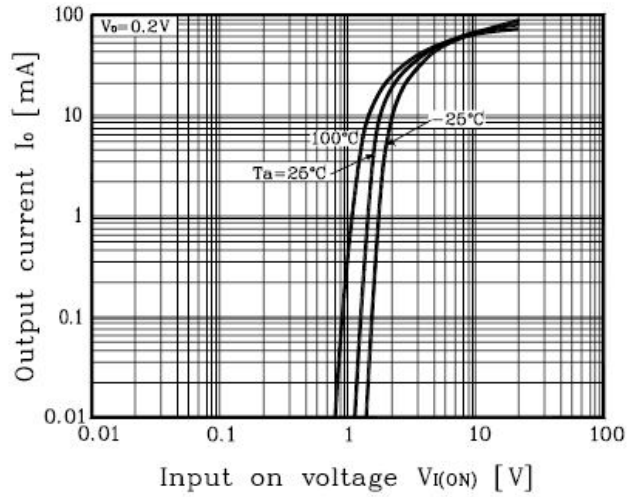


Fig. 3  $I_O - V_{I(OFF)}$

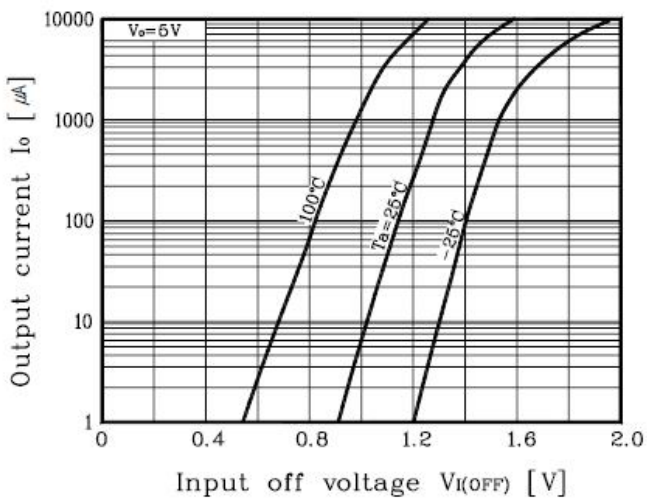
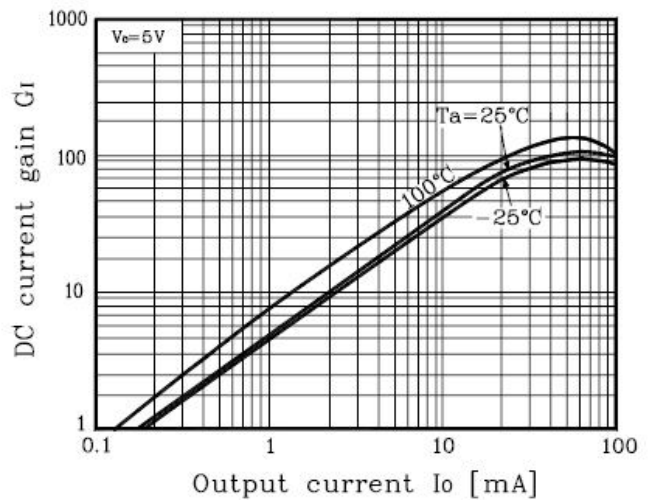
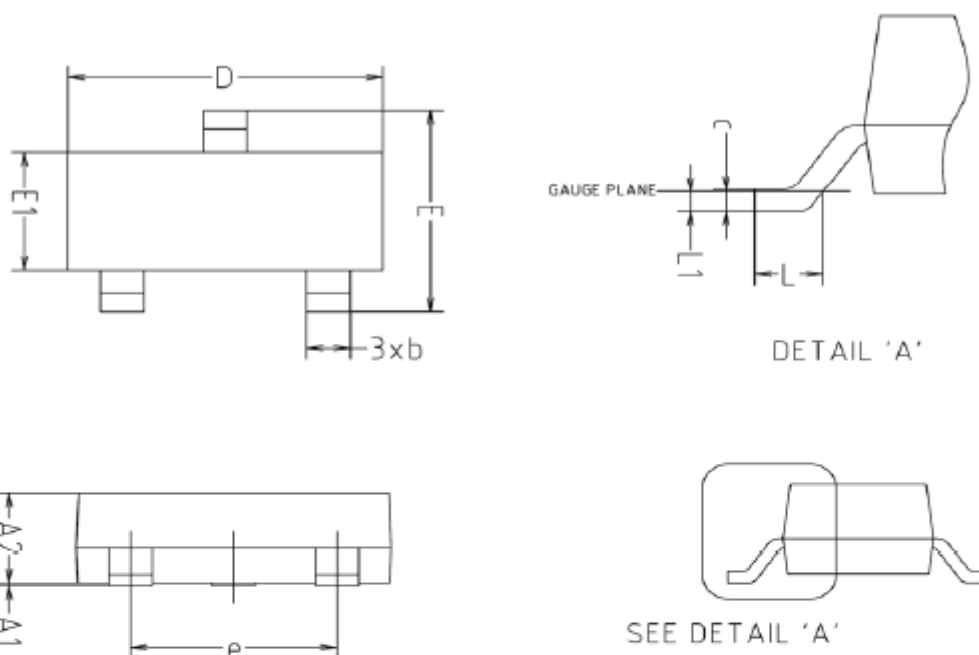


Fig. 4  $G_I - I_O$

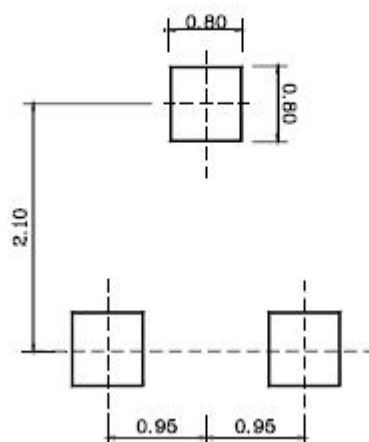


## Outline Dimension 外形尺寸



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A1	0.00	-	0.10	
A2	0.82	-	1.02	
b	0.39	0.42	0.45	
c	0.09	0.12	0.15	
D	2.80	2.90	3.00	
E	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
e	1.90BSC			
L	0.20	-	-	
L1	0.12BSC			

※ Recommend PCB solder land [Unit: mm]



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