

产品规格书

批准	审核	校 核	编 制
纪春华	/	朴致均	郑羿
2018.07.30	/	2018.07.30	2018.07.30

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	2017.08.09	郑羿
2	增加封皮	001	2018.07.30	郑羿



KRC1207S

NPN Silicon Transistor

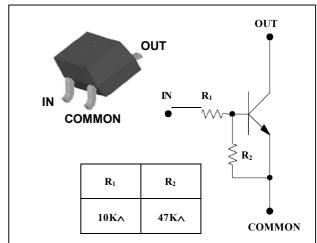
Descriptions

- Switching application
- Interface circuit and driver circuit application

Features

- With built-in bias resistors
- Simplify circuit design
- •Reduce a quantity of parts and manufacturing process
- High packing density

PIN Connection



Ordering Information

Type NO.	Marking	Package Code	
KRC1207S	<u>RC7</u> □•	SOT-23	
	1 2	301-23	

①Device Code ②Year&Week Code • Dalian

Absolute Maximum Ratings

 $(Ta=25^{\circ}C)$

Characteristic	Symbol	Rating	Unit
Out voltage	Vo	50	V
Input voltage	VI	30,-6	V
Out current	I_{O}	100	mA
Power dissipation	P_D	200	mW
Junction temperature	T _J	150	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	$V_0 = 50V, V_I = 0$	-	-	500	nA
DC current gain	G_{I}	V _O =5V, I _O =10mA	80	150	-	-
Output voltage	$V_{O(ON)}$	$I_O=10$ mA, $I_I=0.5$ mA	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	V ₀ =0.2V, I ₀ =5mA	-	-	1.8	V
Input voltage (OFF)	$V_{I(OFF)}$	V _O =5V, I _O =0.1mA	0.5	-	-	V
Transition frequency	f _T *	$V_0=10V$, $I_0=5mA$, $f=1MHz$	-	200	-	MHz
Input current	I_{I}	$V_I=5V$, $I_O=0$	-	-	0.88	mA
Input resistor (Input to base)	R_1	-	7	10	13	K Ω
Input resistor (Base to common)	R ₂	-	33	47	61	K Ω

^{* :} Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 P_D - Ta

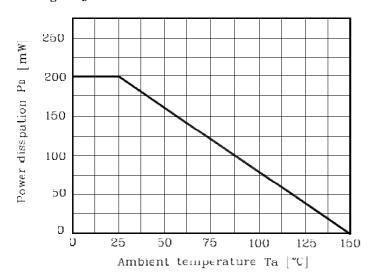


Fig. 2 I_{O} - $V_{I\left(ON\right)}$

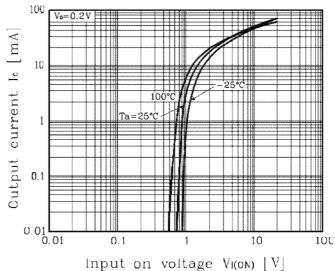


Fig. 3 $I_{\rm O}$ - $V_{\rm I(OFF)}$

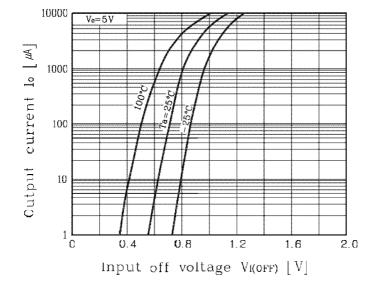
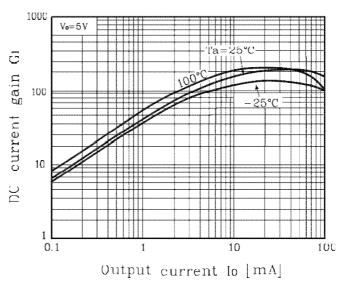
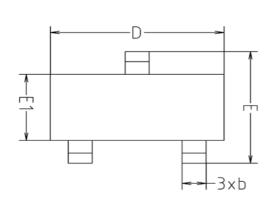
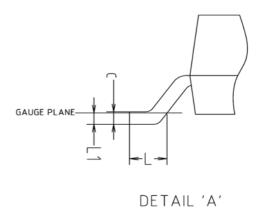


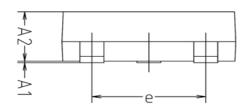
Fig. 4 G_I - I_O



Outline Dimension



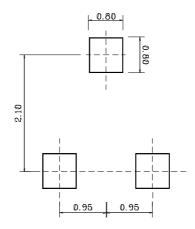






SYMBOL	MILLIMETERS			NOTE
STRIBUL	MINIMUM	NOMINAL	MAXIMUM	1012
A1	0.00	-	0.10	
A2	0.82	-	1.02	
Ь	0.39	0.42	0.45	
С	0.09	0.12	0.15	
D	2.80	2.90	3.00	
Е	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
е	1.90BSC			
L	0.20	-	-	
L1	0.12BSC			

***Recommend PCB solder land [Unit: mm]**



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