

Descriptions

- Switching application
- Interface circuit and driver circuit application

PIN Connection

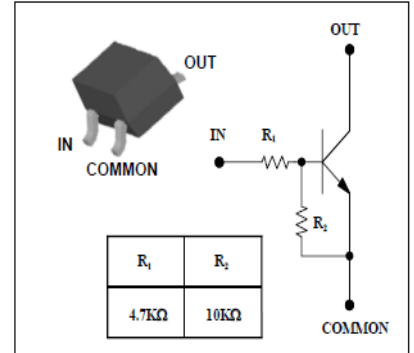
Features

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

Ordering Information

Type NO.	Marking	Package Code
KRC1219S	RCC □ • ① ②	SOT-23

① Device Code ② Year & Week Code • Dalian



Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Output voltage	V_o	50	V
Input voltage	V_I	20,-7	V
Output current	I_o	100	mA
Power dissipation	P_D	200	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	$V_o=50V, V_I=0$	-	-	500	nA
DC current gain	G_I	$V_o=5V, I_o=10mA$	30	-	-	-
Output voltage	$V_{O(ON)}$	$I_o=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_o=0.2V, I_o=5mA$	-	1.2	1.6	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_o=5V, I_o=0.1mA$	0.5	0.82	-	V
Transition frequency	f_T^*	$V_o=10V, I_o=5mA, f=1MHz$	-	200	-	MHz
Input current	I_I	$V_I=5V, I_o=0$	-	-	1.8	mA
Input resistor (Input to base)	R_1	-	3.3	4.7	6.1	KΩ
Input resistor (Base to common)	R_2	-	7	10	13	KΩ

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 $P_D - T_a$

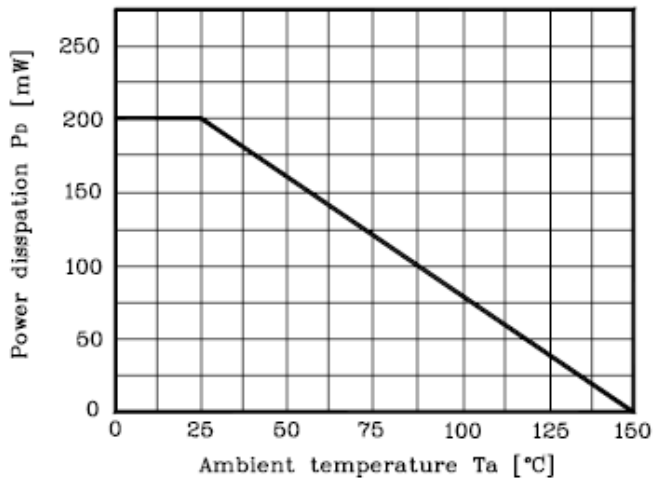


Fig. 2 $I_O - V_{I(ON)}$

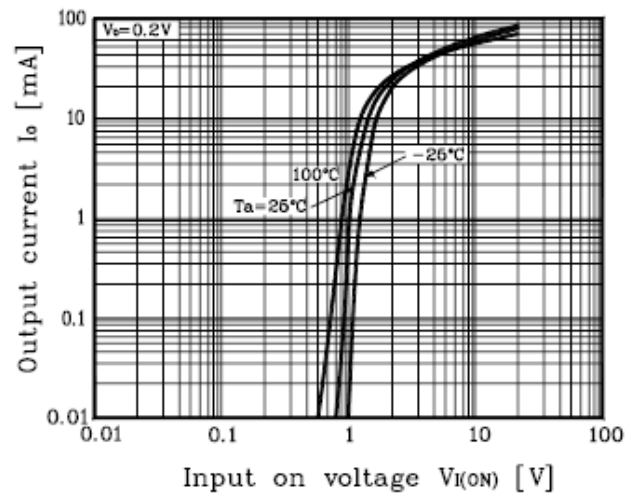


Fig. 3 $I_O - V_{I(OFF)}$

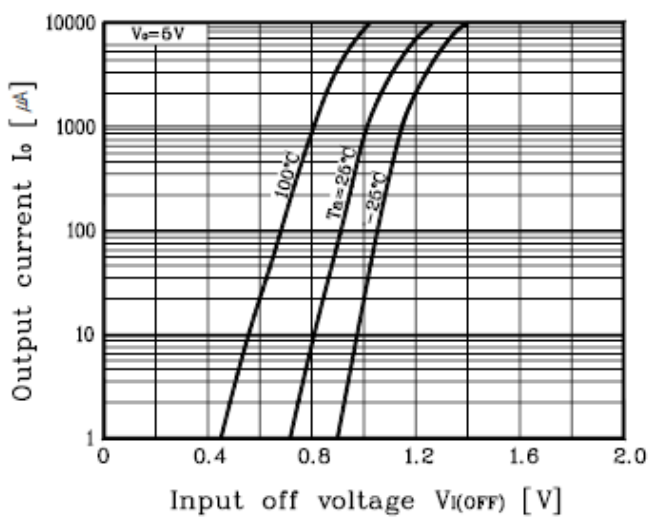
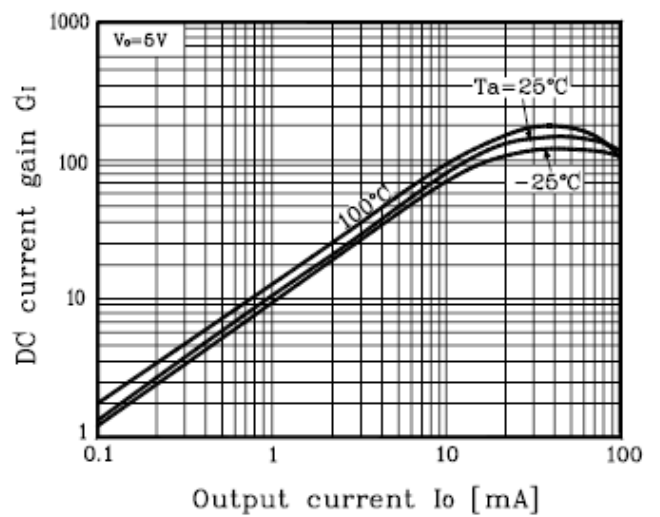
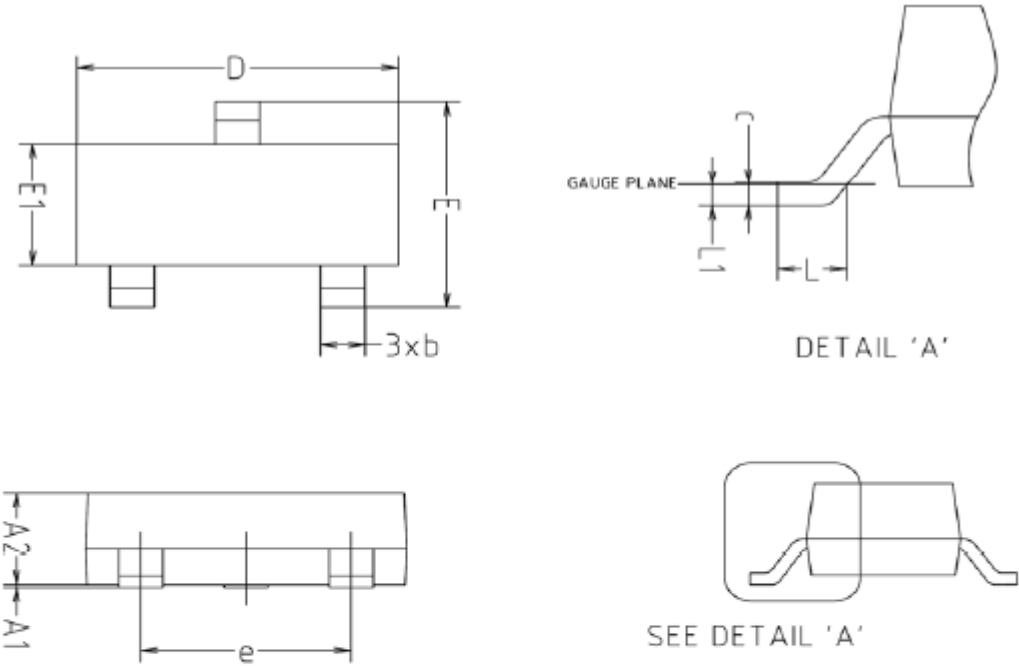


Fig. 4 $G_I - I_O$

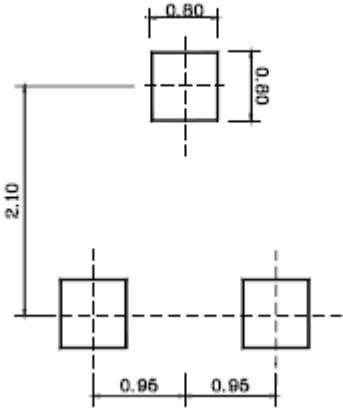


Outline Dimension



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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