

Descriptions

- Switching application
- Interface circuit and driver circuit application

PIN Connection

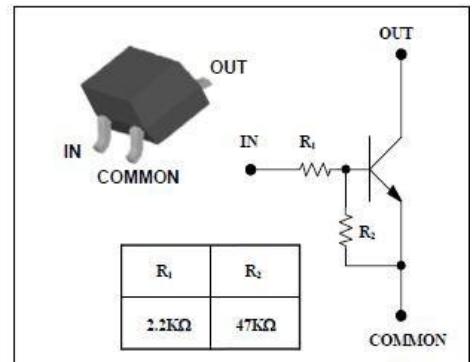
Features

- 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
KRC1205S	RC5 □ • ① ②	SOT-23

①Device Code ② Year& Week Cod • Dalian



Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Output voltage	V_o	50	V
Input voltage	V_I	15,-5	V
Output current	I_o	100	mA
Power dissipation	P_D	200	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-50~150	°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	$V_o=5V, I_o=10mA$	80	200	-	-
Output voltage	$V_{o(ON)}$	$I_o=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_o=0.2V, I_o=5mA$	-	-	1.1	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_o=5V, I_o=0.1mA$	0.5	-	-	V
Transition frequency	f_T^*	$V_o=10V, I_o=5mA, f=1MHz$	-	200	-	MHz
Input current	I_I	$V_I=5V, I_o=0$	-	-	3.6	mA
Input resistor (Input to base)	R_1	-	1.54	2.2	2.86	kΩ
Input resistor (Base to common)	R_2	-	33	47	61	kΩ

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 P_D - T_a

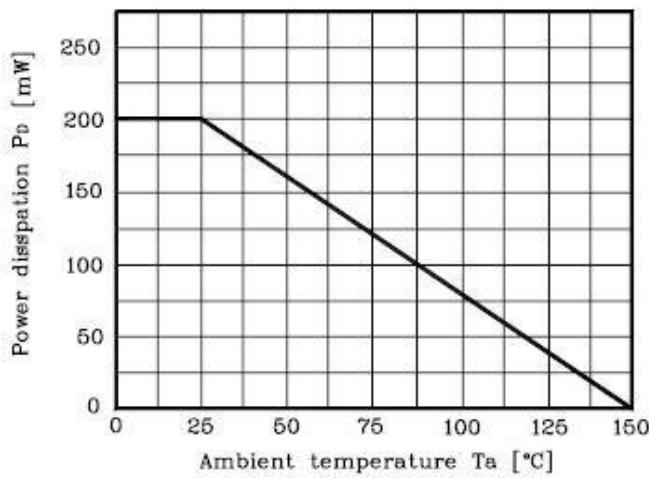


Fig. 2 I_O - $V_{I(ON)}$

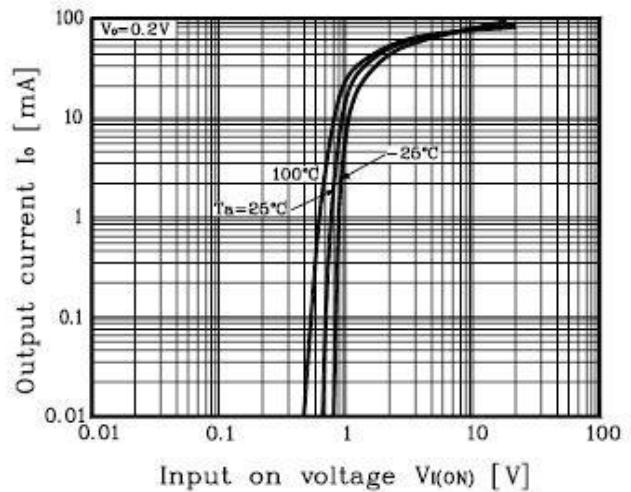


Fig. 3 I_O - $V_{I(OFF)}$

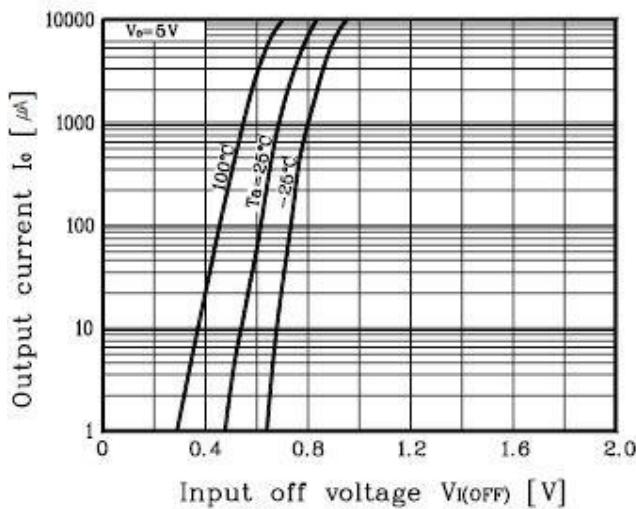
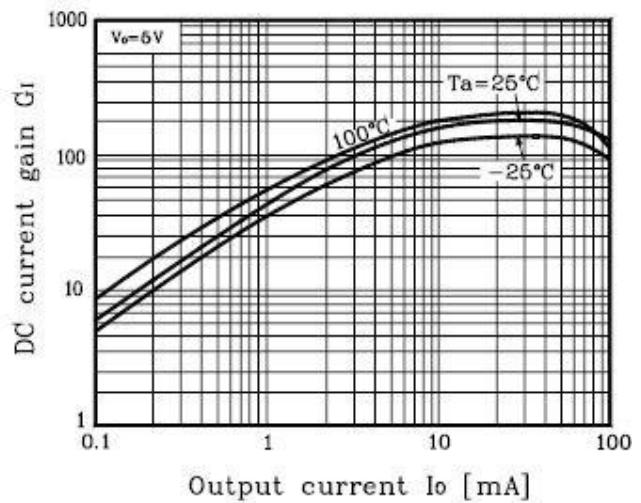
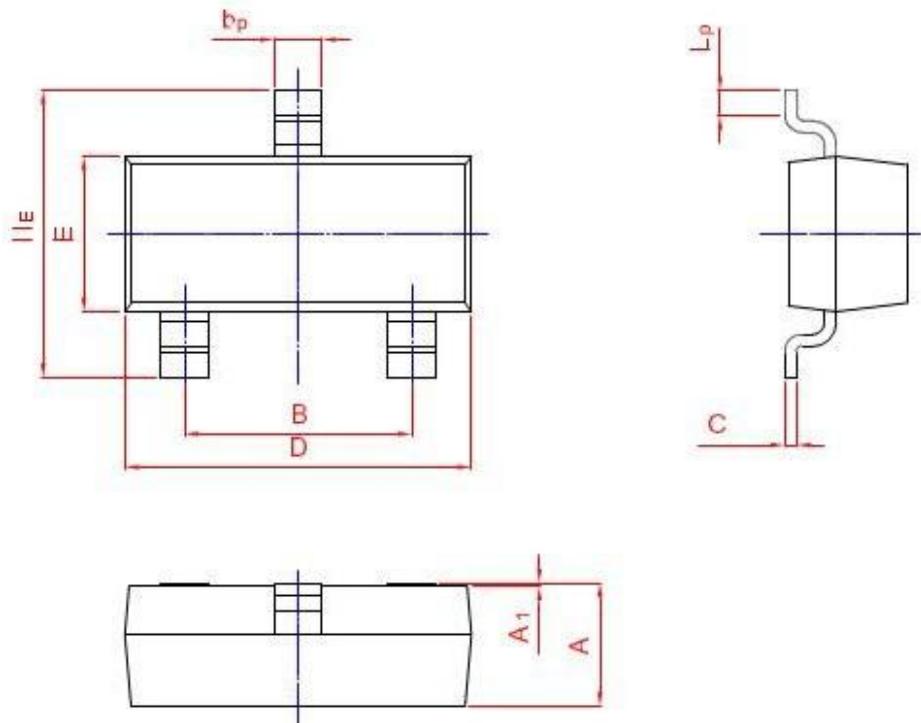


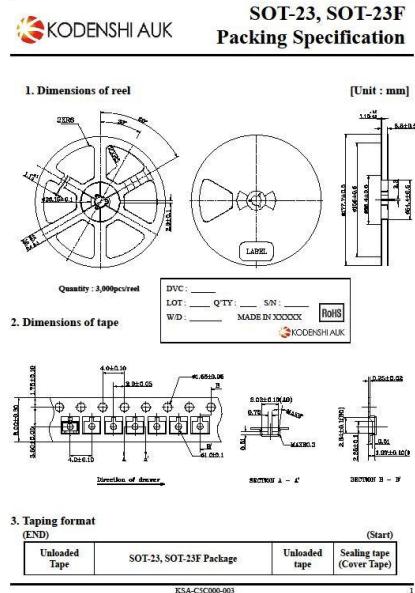
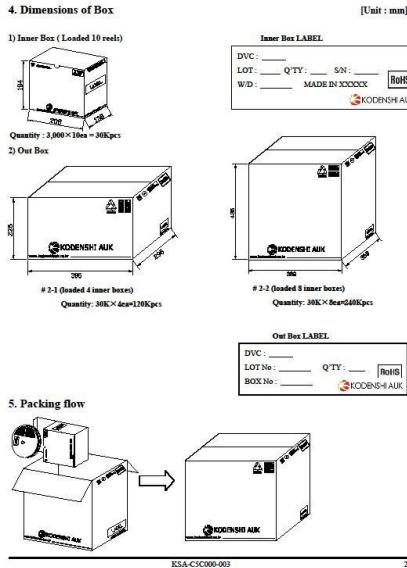
Fig. 4 G_I - I_O



Outline Dimension

UNIT	A	B	b _p	C	D	H _E	A ₁	L _p	
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20

Packing Specification



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