KODENSHI AUK

SRC1210EF

NPN Silicon Transistor

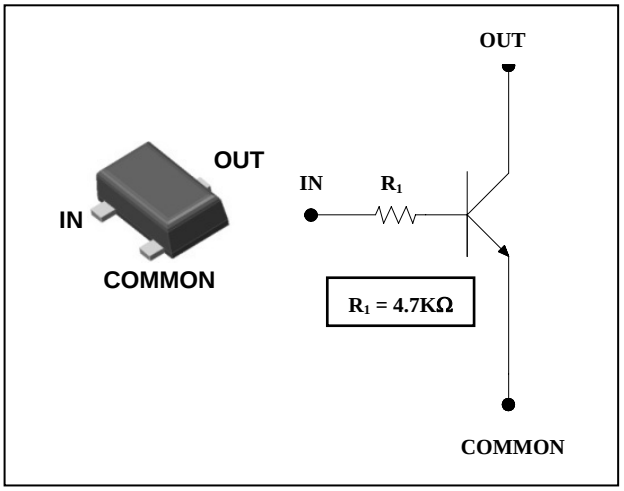
Descriptions

- Switching application
- Interface circuit and driver circuit application

Features

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

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
SRC1210EF	RA □ ① ②	SOT-523F

①Device Code ②Year&Week Code

Absolute Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V_O	50	V
Input voltage	V_I	20, -5	V
Output current	I_O	100	mA
Power dissipation	P_D	150	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	120	-	-	-
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	-	0.8	1.2	V
Input voltage (OFF)	$V_{I(OFF)}$	V_O=5V, I_O=0.1mA	0.3	0.55	-	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

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 P_D - Ta

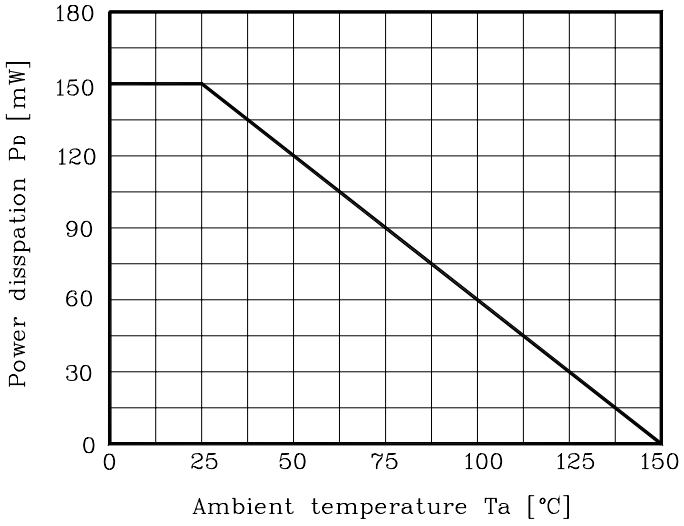


Fig. 2 I_O - $V_{I(ON)}$

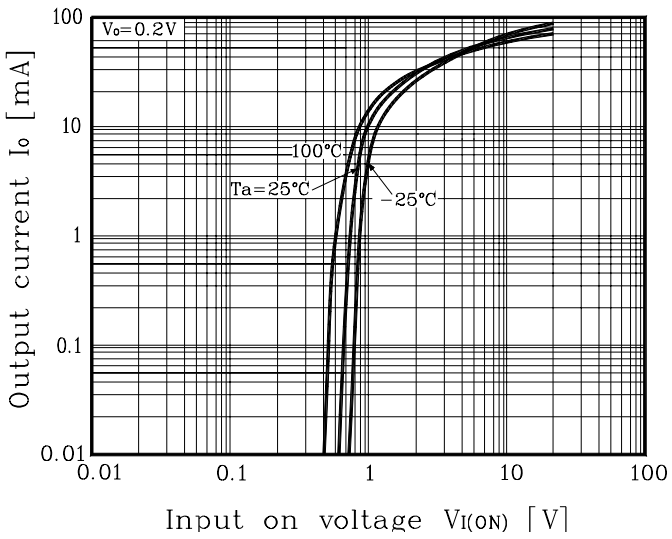


Fig. 3 I_O - $V_{I(OFF)}$

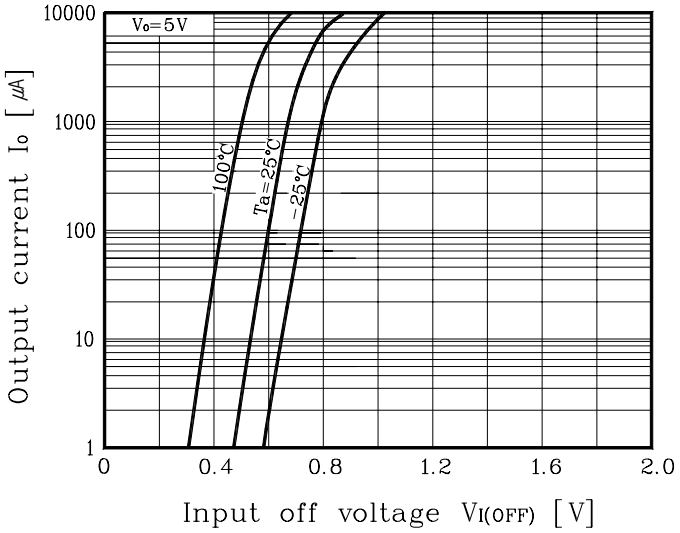
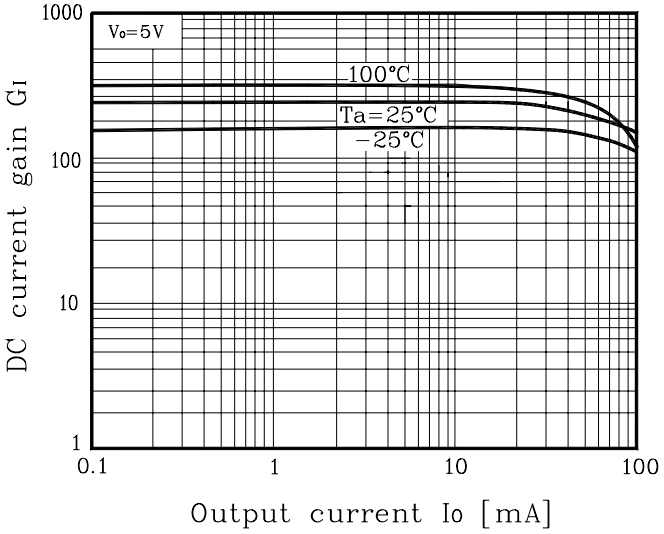
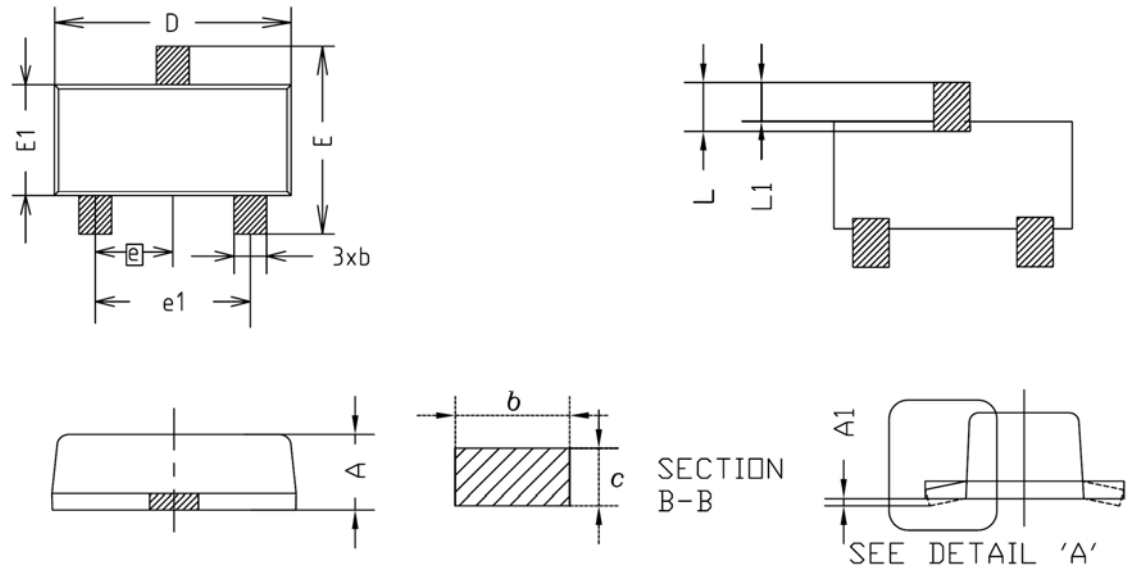


Fig. 4 G_I - I_O

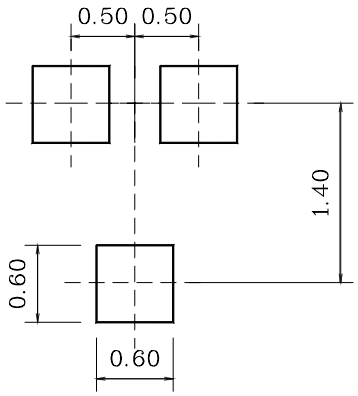


Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.63	0.68	0.73	
A1	0.00	–	0.10	
A2	–	–	–	
b	0.25	0.30	0.35	
c	0.04	0.11	0.20	
D	1.50	1.60	1.70	
E	1.50	1.60	1.70	
E1	0.78	0.88	0.98	
e	0.50BSC			
e1	0.90	–	1.10	
L	0.34	0.44	0.54	
L1	0.28	0.34	0.43	

※Recommend PCB solder land [Unit: mm]



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