

## Descriptions

- Digital transistor

## Features

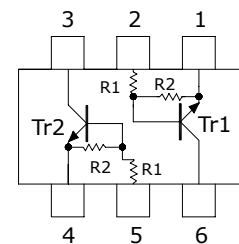
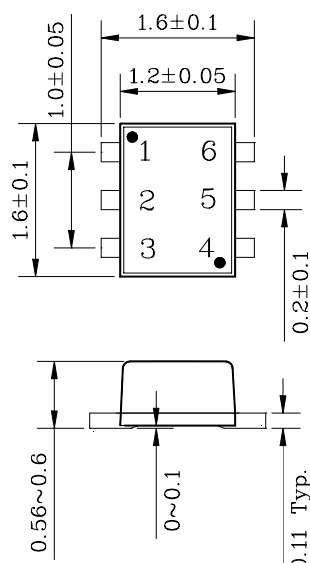
- Two SRC1207 chips in SOT-563F package
- With built-in bias resistors

## Ordering Information

Type NO.	Marking	Package Code
SUR542EF	SK	SOT-563F

## Outline Dimensions

unit : mm



	R <sub>1</sub>	R <sub>2</sub>
Tr1	10KΩ	47KΩ
Tr2	10KΩ	47KΩ

### PIN Connections

1. Emitter 1
2. Base 1
3. Collector 2
4. Emitter 2
5. Base 2
6. Collector 1

**Absolute maximum ratings (Tr1, Tr2)**

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Out Voltage	V <sub>O</sub>	50	V
Input Voltage	V <sub>I</sub>	30	V
Out Current	I <sub>O</sub>	100	mA
Power Dissipation	P <sub>D</sub>	100	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ 150	°C

**Electrical Characteristics(Tr1, Tr2 : PNP)**

Ta=25°C

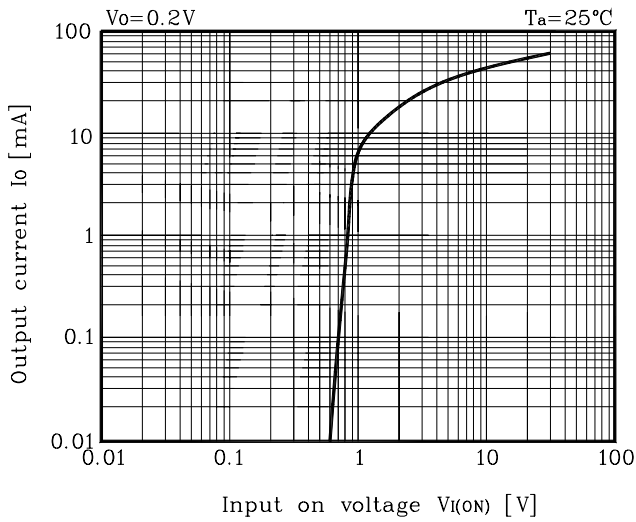
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output Cut-off Current	I <sub>O(OFF)</sub>	V <sub>O</sub> =50V, V <sub>I</sub> =0	-	-	500	nA
DC Current Gain	G <sub>I</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =10mA	80	150	-	-
Output Voltage	V <sub>O(ON)</sub>	I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	V
Input Voltage (ON)	V <sub>I(ON)</sub>	V <sub>O</sub> =0.2V, I <sub>O</sub> =5mA	-	-	1.8	V
Input Voltage (OFF)	V <sub>I(OFF)</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =0.1mA	0.5	-	-	V
Transition Frequency	f <sub>T</sub> *	V <sub>O</sub> =10V, I <sub>O</sub> =5mA	-	200	-	MHz
Input Current	I <sub>I</sub>	V <sub>I</sub> =5V	-	-	0.88	mA

\* : Characteristic of Transistor Only

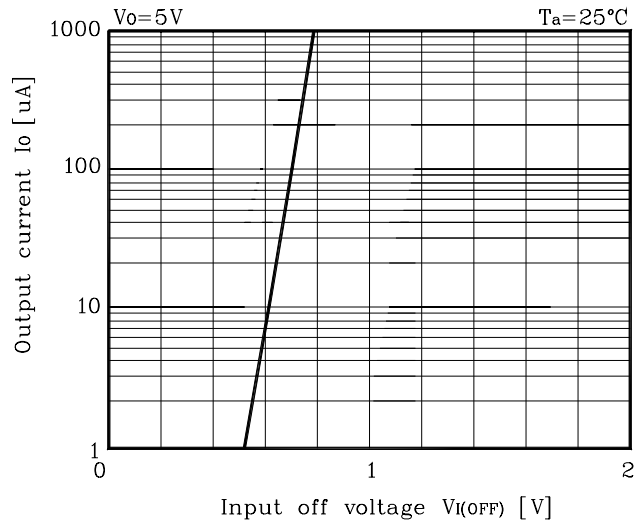
**Electrical Characteristic Curves**

Tr1, Tr2 : NPN

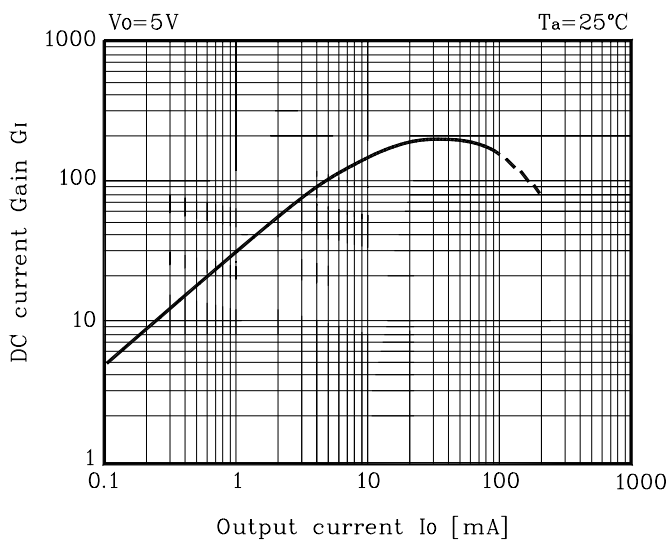
**Fig. 1  $I_O - V_{I(ON)}$**



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



**Fig. 3  $G_I - I_O$**



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