

**SRC1207UF**

NPN Silicon Transistor

Descriptions

- Switching application
- Interface circuit and driver circuit application

Features

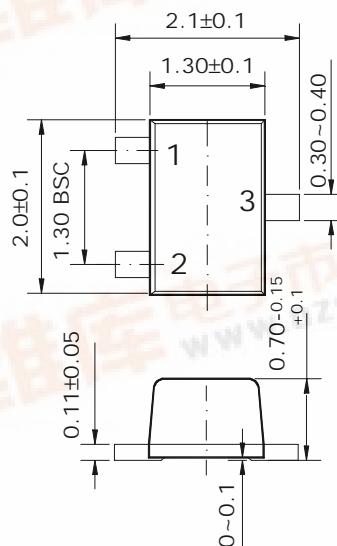
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

Ordering Information

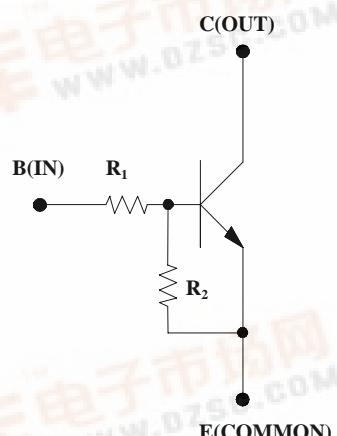
Type NO.	Marking	Package Code
SRC1207UF	R7	SOT-323F

Outline Dimensions

unit : mm



• Equivalent Circuit



PIN Connections

1. Base
2. Emitter
3. Collector

R ₁	R ₂
10KΩ	47KΩ

SRC1207UF

Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Out Voltage	V _O	50	V
Input Voltage	V _I	30	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 _O =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 =10mA, I _I =0.5mA	-	0.1	0.3	V
Input Voltage (ON)	V _{I(ON)}	V _O =0.2V, I _O =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 _O =10V, I _O =5mA	-	200	-	MHz
Input Current	I _I	V _I =5V	-	-	0.88	mA

* : Characteristic of Transistor Only

Electrical Characteristic Curves

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

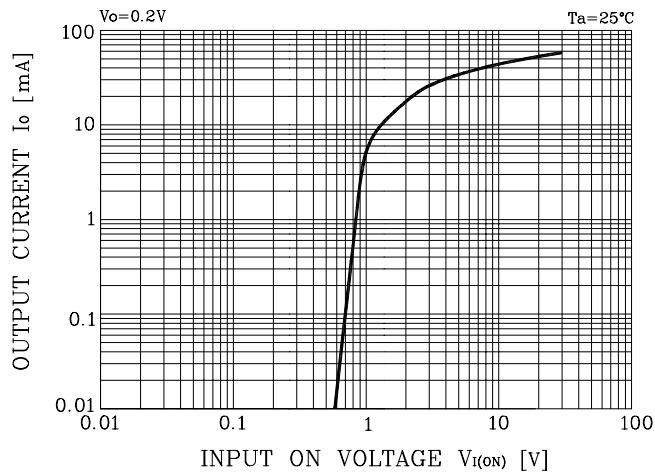


Fig. 2 $I_o - V_{I(OFF)}$

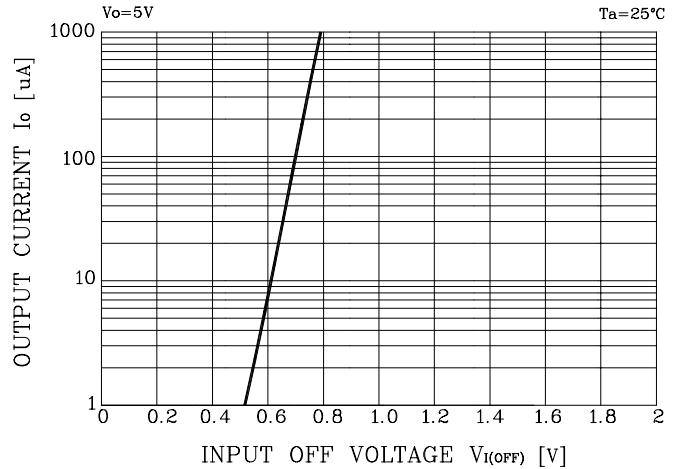


Fig. 3 $G_I - I_o$

