

**Descriptions**

- Switching application
- Interface circuit and driver circuit application

**Features**

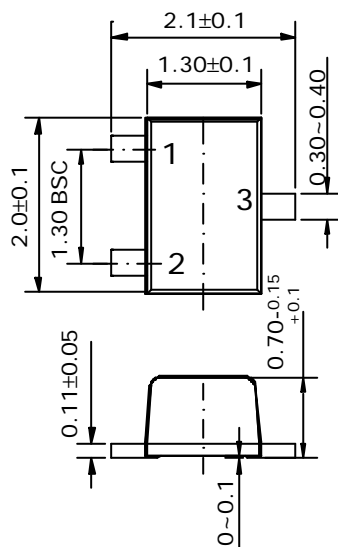
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

**Ordering Information**

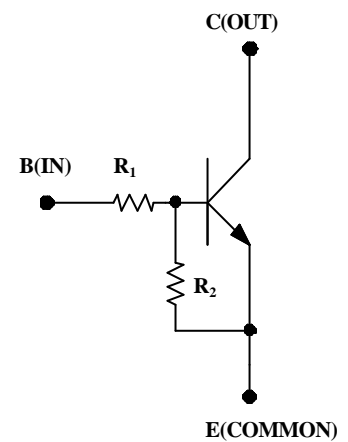
Type NO.	Marking	Package Code
SRC1206UF	R6	SOT-323F

**Outline Dimensions**

unit : mm



**Equivalent Circuit**



**PIN Connections**

1. Base
2. Emitter
3. Collector

R <sub>1</sub>	R <sub>2</sub>
4.7KW	47KW

**Absolute maximum ratings****(Ta=25° C)**

Characteristic	Symbol	Ratings	Unit
Out Voltage	$V_o$	50	V
Input Voltage	$V_i$	20	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	200	-	-
Output Voltage	$V_{O(ON)}$	$I_o=10mA, I_i=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_o=0.2V, I_o=5mA$	-	0.9	1.3	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_o=5V, I_o=0.1mA$	0.5	0.65	-	V
Transition Frequency	$f_T^*$	$V_o=10V, I_o=5mA$	-	200	-	MHz
Input Current	$I_i$	$V_i=5V$	-	-	1.8	mA

\* : Characteristic of Transistor Only

Electrical Characteristic Curves

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

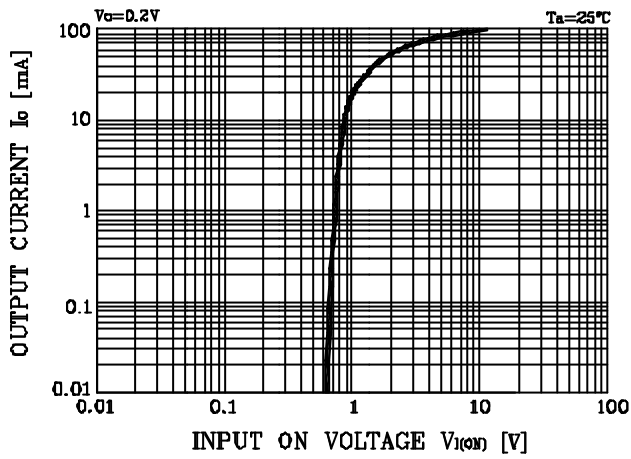


Fig. 2  $I_o - V_{I(OFF)}$

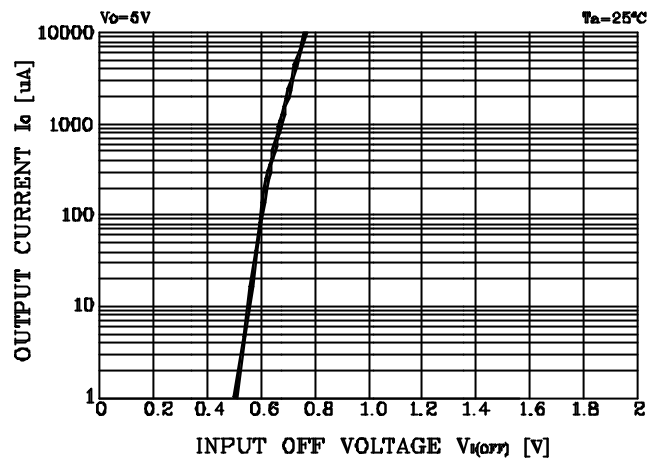


Fig. 3  $G_r - I_o$

