

## Descriptions

- Switching application
  - Interface circuit and driver circuit application

## Features

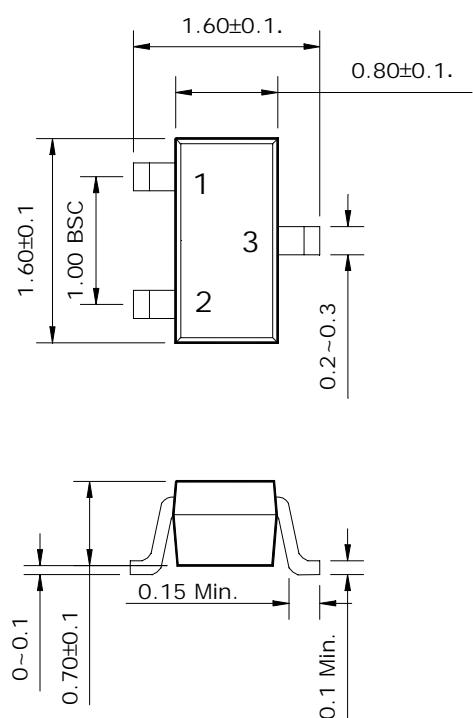
- With built-in bias resistors
  - Simplify circuit design
  - Reduce a quantity of parts and manufacturing process
  - High packing density

## **Ordering Information**

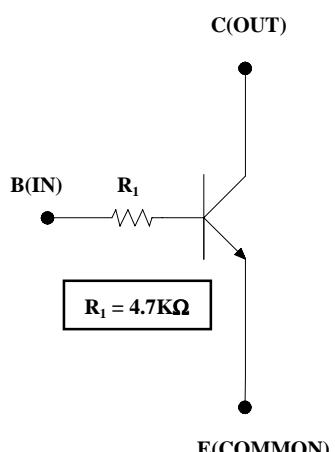
Type NO.	Marking	Package Code
SRC1210E	RA	SOT-523

## Outline Dimensions

unit : mm



- Equivalent Circuit



## **PIN Connections**

## Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base Voltage	V <sub>CBO</sub>	50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>C</sub>	100	mA
Power Dissipation	P <sub>D</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ 150	°C

## Electrical Characteristics

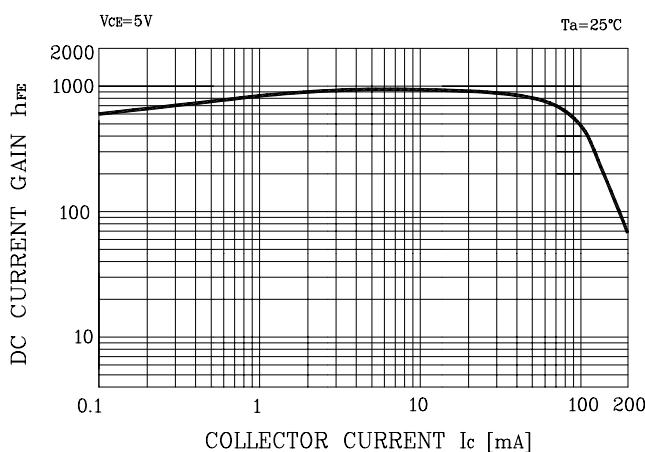
(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0	-	-	500	nA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	500	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	120	-	-	-
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA	-	0.1	0.3	V
Transition Frequency	f <sub>T</sub> <sup>*</sup>	V <sub>CE</sub> =10V, I <sub>C</sub> =5mA	-	250	-	MHz
Input Resistance	R <sub>I</sub>	-	-	4.7	-	KΩ

\* : Characteristic of Transistor Only

## Electrical Characteristic Curves

**Fig. 1 h<sub>FE</sub> - I<sub>C</sub>**



**Fig. 2 V<sub>CE(SAT)</sub> - I<sub>C</sub>**

