



# SRC1212UF

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
SRC1212UF	RB	SOT-323F

## Outline Dimensions

unit : mm

• Equivalent Circuit

**PIN Connections**

1. Base
2. Emitter
3. Collector



## Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	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
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=50V, I_E=0$	-	-	500	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	500	nA
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=1mA$	120	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=10mA, I_B=0.5mA$	-	0.1	0.3	V
Transition Frequency	$f_T^*$	$V_{CE}=10V, I_C=5mA$	-	250	-	MHz
Input Resistance	$R_1$	-	-	100	-	KΩ

\* : Characteristic of Transistor Only

## Electrical Characteristic Curves

Fig. 1  $h_{FE} - I_C$

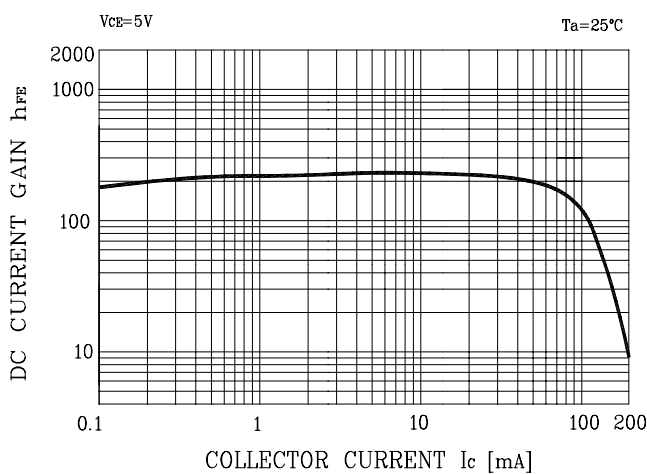


Fig. 2  $V_{CE(SAT)} - I_C$

