

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
SRC1212EF	RB	SOT-523F

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	150	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 $h_{FE} - I_C$

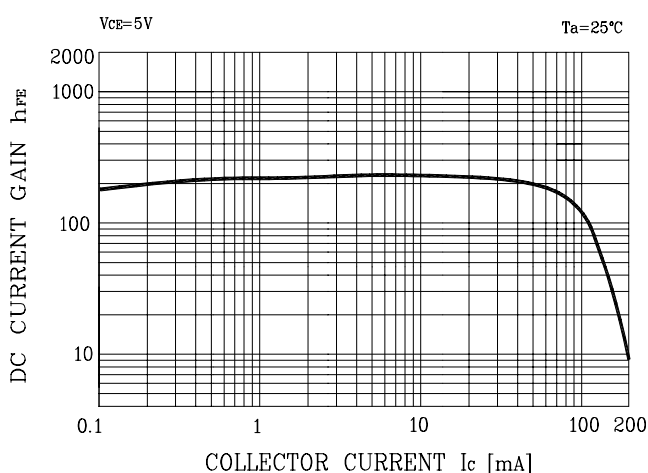


Fig. 2 $V_{CE(SAT)} - I_C$

