

Description

- Digital transistor

Features

- Two SRC1211 chips in SOT-563F package
- With built-in bias resistors

Ordering Information

Type NO.	Marking	Package Code
SUR541EF	JW	SOT-563F

Outline Dimensions

unit : mm

	R_1
Tr1	10K Ω
Tr2	10K Ω

PIN Connections

1. Emitter 1
2. Base 1
3. Collector 2
4. Emitter 2
5. Base 2
6. Collector 1

Absolute maximum ratings (Tr1, Tr2)

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Power Dissipation	P_D	100	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ 150	°C

Electrical Characteristics(Tr1, Tr2 : NPN)

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	-	-	10	-	KΩ
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	500	nA

* : Characteristic of Transistor Only

Electrical Characteristic Curves

Tr1, Tr2 : NPN

Fig. 1 $h_{FE} - I_C$

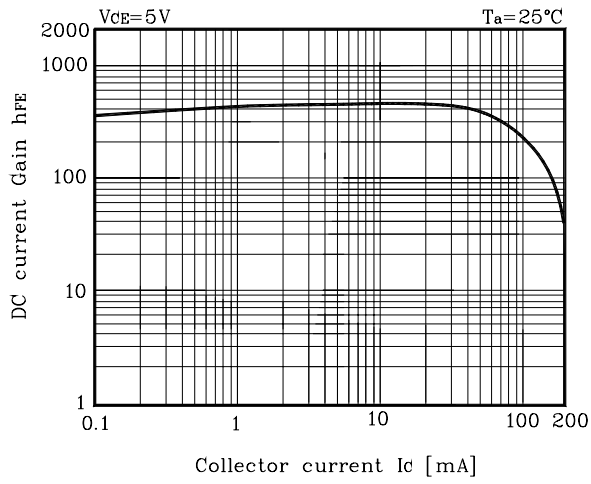
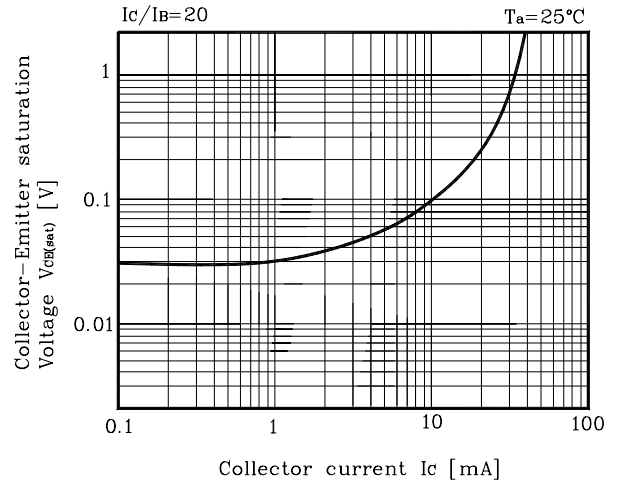


Fig. 2 $V_{CE(SAT)} - I_C$



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