

Description

- General small signal amplifier

Features

- Low collector saturation voltage : $V_{CE}=0.25V(\text{Max.})$
- Low output capacitance : $C_{ob}=2pF(\text{Typ.})$
- Complementary pair with 2SA1980UF

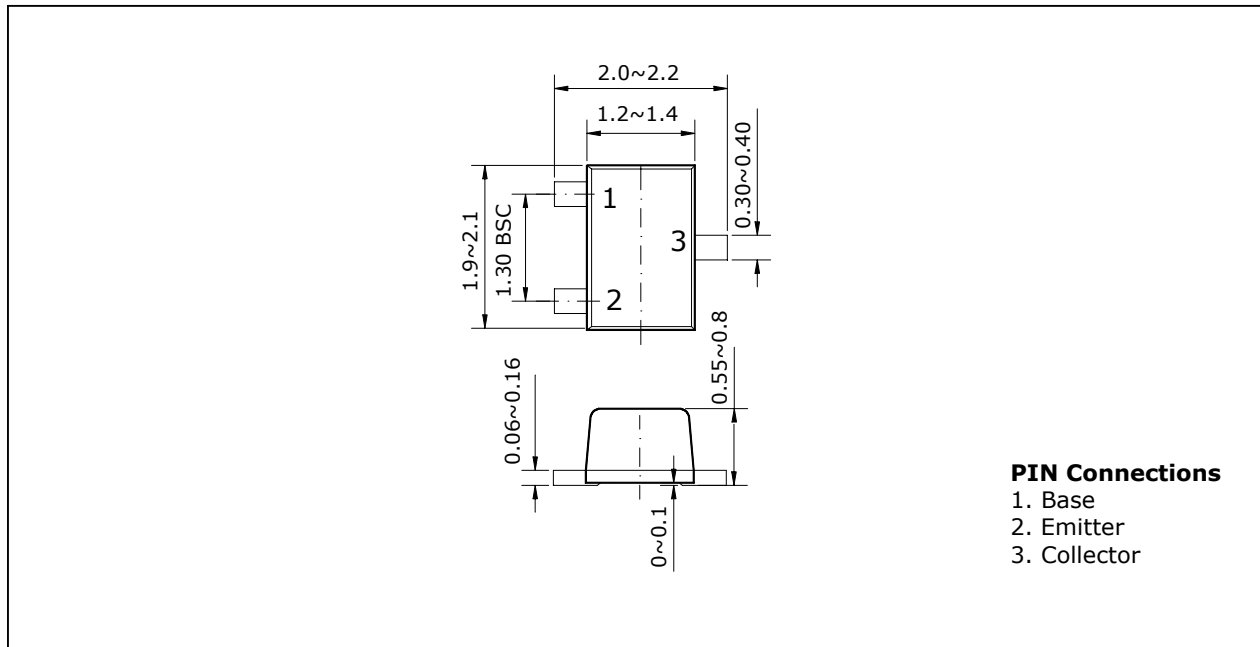
Ordering Information

Type NO.	Marking	Package Code
2SC5343UF	D□	SOT-323F

□ : h_{FE} rank

Outline Dimensions

unit : mm



Absolute maximum ratings

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V _{CBO}	60	V
Collector-Emitter voltage	V _{CEO}	50	V
Emitter-Base voltage	V _{EBO}	5	V
Collector current	I _C	150	mA
Collector dissipation	P _C	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-Base breakdown voltage	BV _{CBO}	I _C =100μA, I _E =0	60	-	-	V
Collector-Emitter breakdown voltage	BV _{CEO}	I _C =1mA, I _B =0	50	-	-	V
Emitter-Base breakdown voltage	BV _{EBO}	I _E =10μA, I _C =0	5	-	-	V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0	-	-	0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0	-	-	0.1	μA
DC current gain	h _{FE} *	V _{CE} =6V, I _C =2mA	70	-	700	-
Collector-Emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA	-	-	0.25	V
Transistion frequency	f _T	V _{CE} =10V, I _C =1mA	80	-	-	MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz	-	2	3.5	pF
Noise figure	NF	V _{CE} =6V, I _C =0.1mA, f=1KHz, R _g =10KΩ	-	-	10	dB

* : h_{FE} rank / O : 70 ~ 140, Y : 120 ~ 240, G : 200 ~ 400, L : 300 ~ 700

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

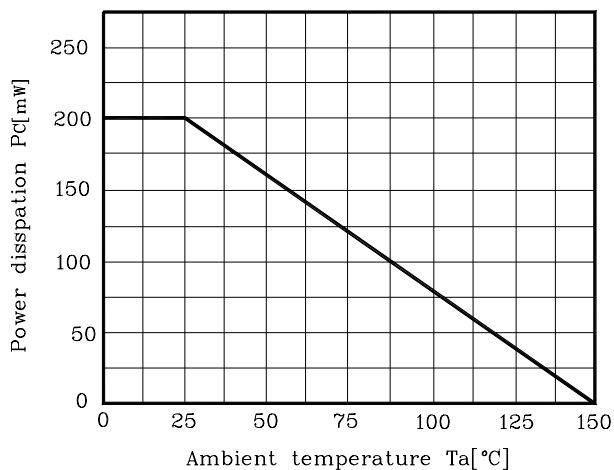


Fig. 2 $I_C - V_{BE}$

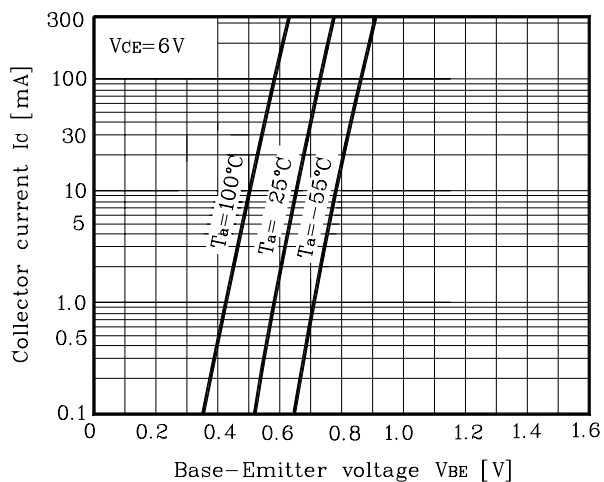


Fig. 3 $I_C - V_{CE}$

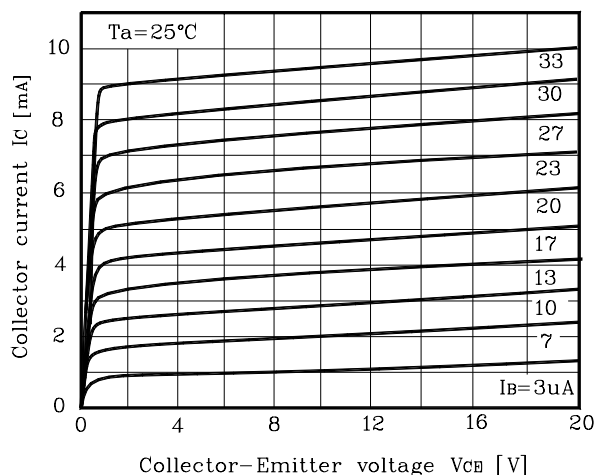


Fig. 4 $h_{FE} - I_C$

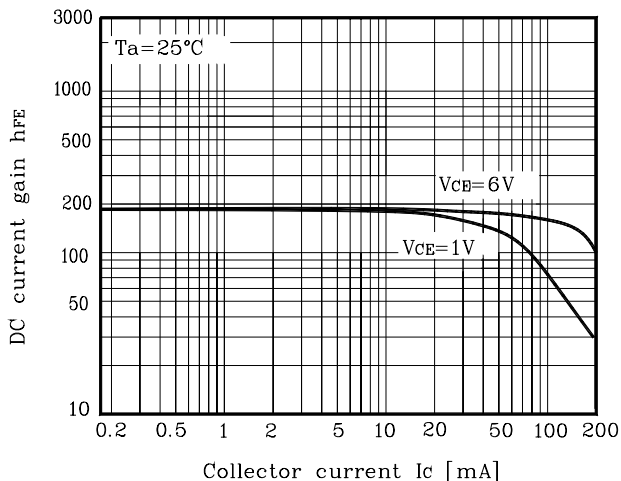
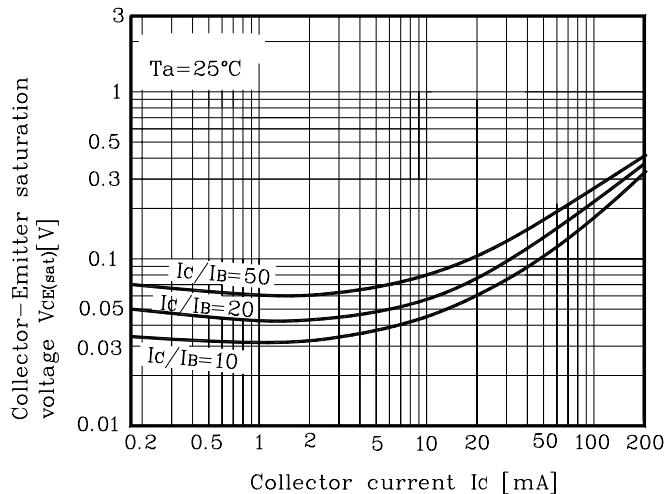


Fig. 5 $V_{CE(sat)} - I_C$



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