AUK Semiconductor

STA343

PNP Silicon Transistor

Descriptions

- High voltage application
- Color TV chroma output application

Features

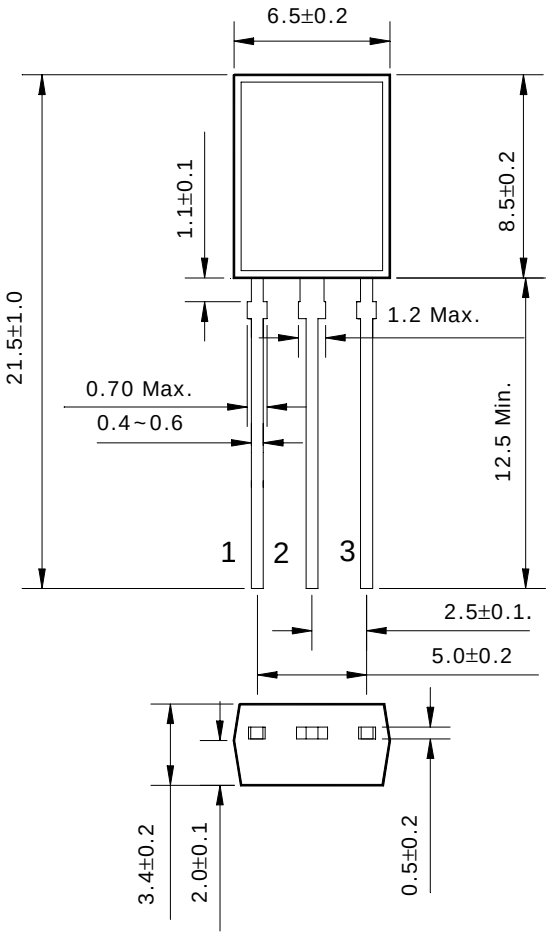
- Collector-Emitter voltage V_{CEO}=-300V
- Complementary pair with STC344

Ordering Information

Type NO.	Marking	Package Code
STA343	STA343	MPT

Outline Dimensions

unit : mm



PIN Connections
1. Emitter
2. Collector
3. Base

Absolute maximum ratings (Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-300	V
Collector-Emitter voltage	V_{CEO}	-300	V
Emitter-Base voltage	V_{EBO}	-7	V
Collector current	I_C	-100	mA
Emitter Current	I_E	100	mA
Collector dissipation	P_C	1.2	W
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=-50μA, I_E=0	-300	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-300	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-50μA, I_C=0	-7	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-300V, I_E=0	-	-	-0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.5	μA
DC current gain	h_{FE}	V_{CE}=-10V, I_C=-10mA	40	-	300	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=-10mA, I_B=-1mA	-	-	-0.5	V
Transition frequency	f_T	V_{CE}=-10V, I_C=-20mA	50	85	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-20V, I_E=0, f=1MHz	-	6	-	pF

Electrical Characteristic Curves

Fig. 1 h_{FE} - I_C

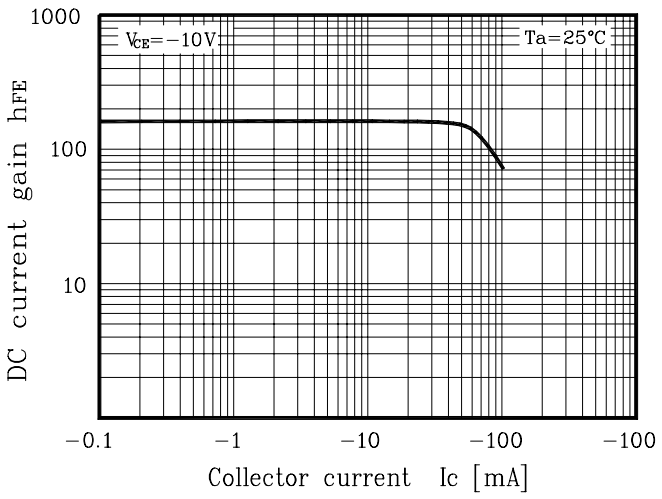


Fig. 2 $V_{CE(sat)}$ - I_C

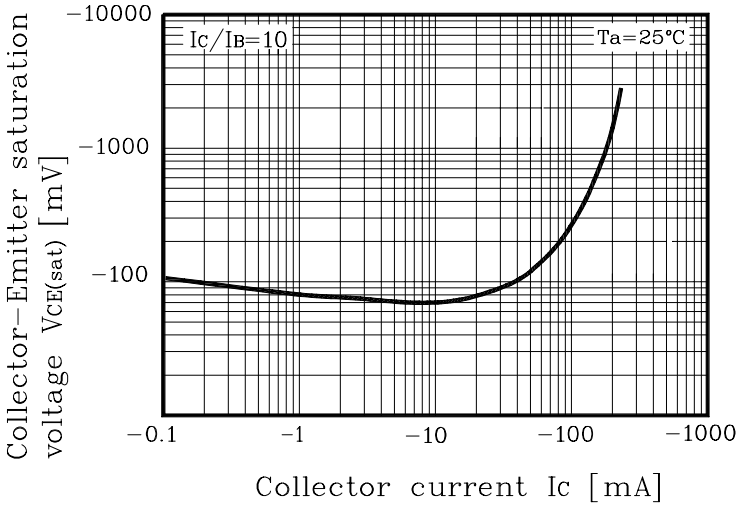


Fig. 3 f_T - I_C

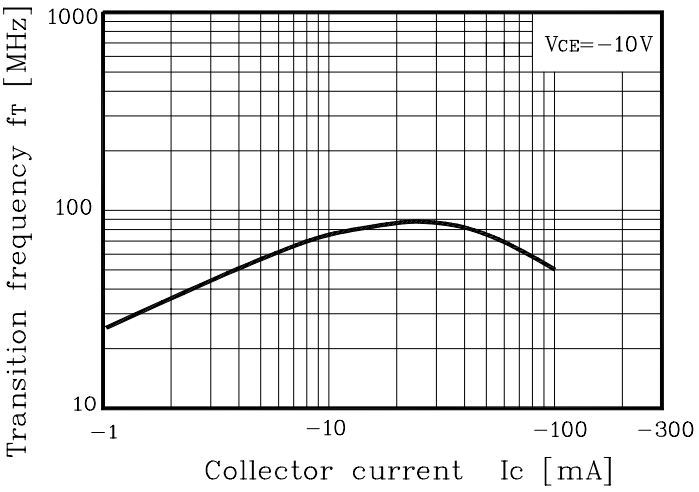


Fig. 4 C_{Ob} - V_R