

**Descriptions**

- High voltage application
- Color TV chroma output application

**Features**

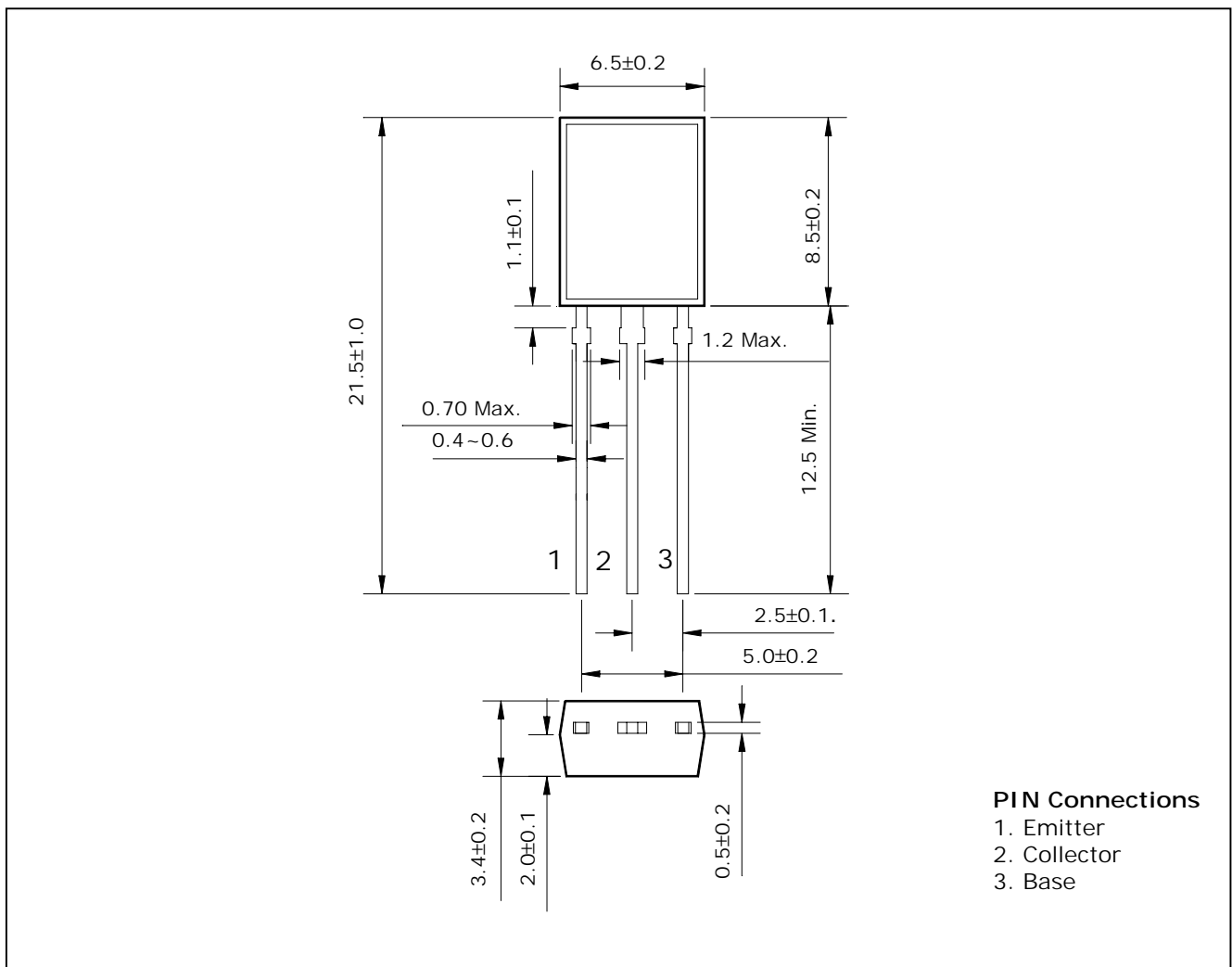
- Collector-Emitter voltage  $V_{CEO} = -300V$
- Complementary pair with STC344

**Ordering Information**

Type NO.	Marking	Package Code
STA343	STA343	MPT

**Outline Dimensions**

unit : mm



## 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

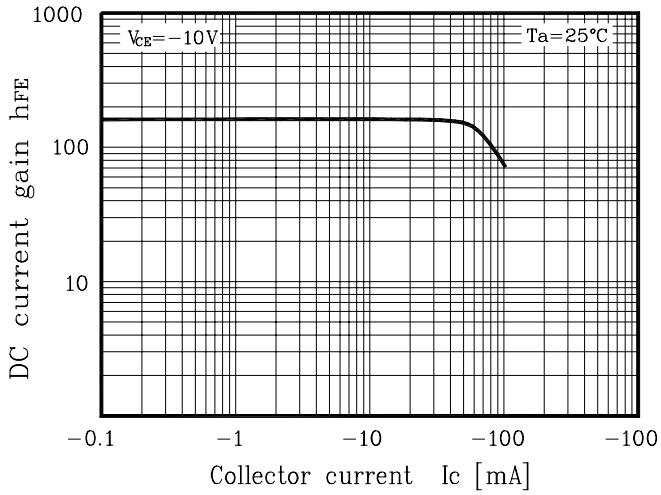
## Electrical Characteristics

(Ta=25°C)

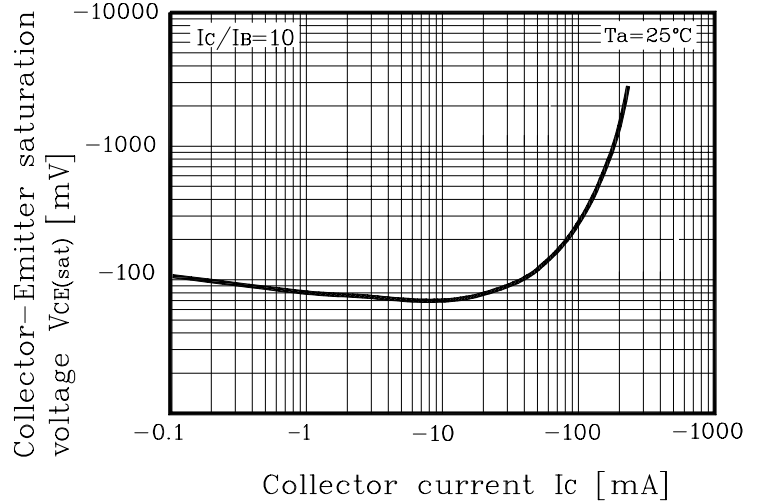
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	$BV_{CBO}$	$I_C = -50\mu A, I_E = 0$	-300	-	-	V
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C = -1mA, I_B = 0$	-300	-	-	V
Emitter-Base breakdown voltage	$BV_{EBO}$	$I_E = -50\mu A, I_C = 0$	-7	-	-	V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -300V, I_E = 0$	-	-	-0.5	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	-	-	-0.5	$\mu A$
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

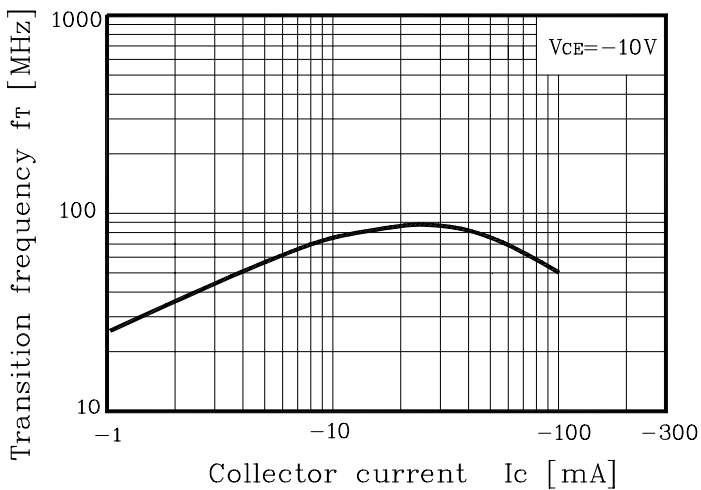
**Fig. 1**  $h_{FE} - I_C$



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



**Fig. 3**  $f_T - I_C$



**Fig. 4**  $C_{ob} - V_R$

