

Descriptions

- High voltage application
- Color TV horizontal driver application
- Color TV chroma output application

Features

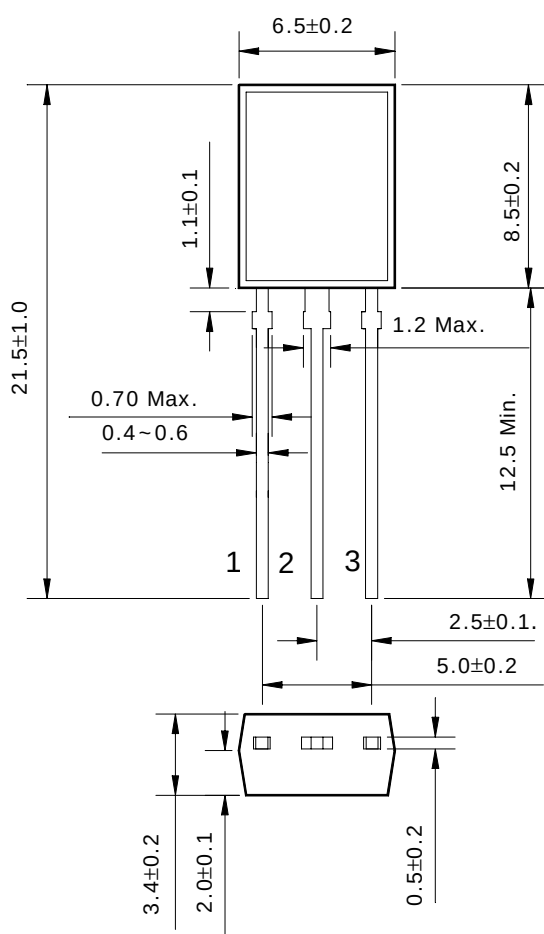
- Collector-Emitter voltage $V_{CEO} = 300V$
- Complementary pair with STA343

Ordering Information

Type NO.	Marking	Package Code
STC344	STC344	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}	$I_C = 50\mu A, I_E = 0$	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	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	95	-	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 20V, I_E = 0, f = 1MHz$	-	3	-	pF

Electrical Characteristic Curves

Fig. 1 $h_{FE} - I_C$

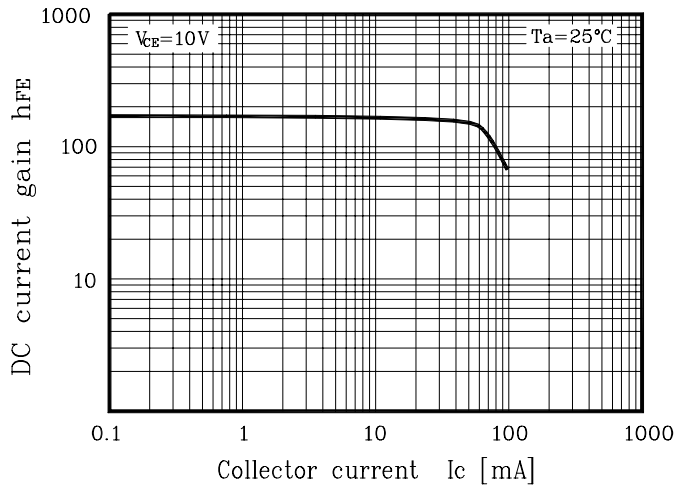


Fig. 2 $V_{CE(sat)} - I_C$

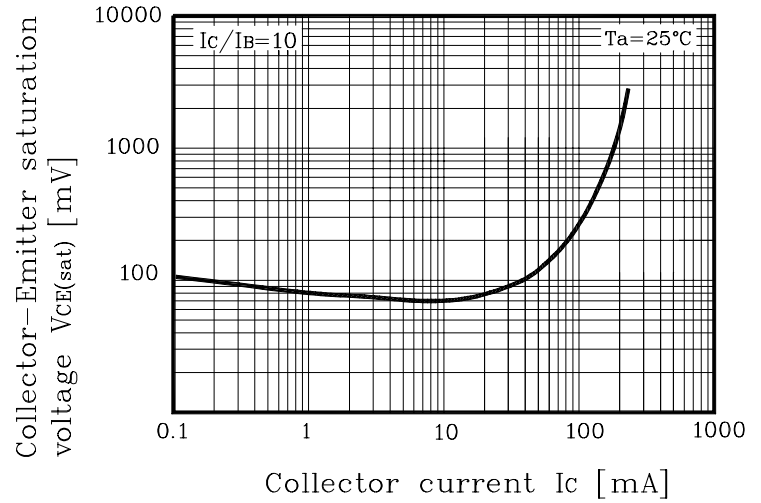


Fig. 3 $f_T - I_C$

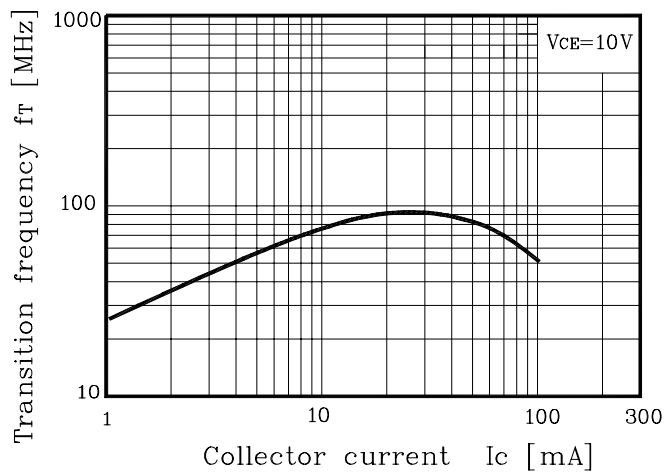


Fig. 4 $C_{Ob} - V_R$

