

Descriptions

- High voltage application
- Color TV chroma output application

Features

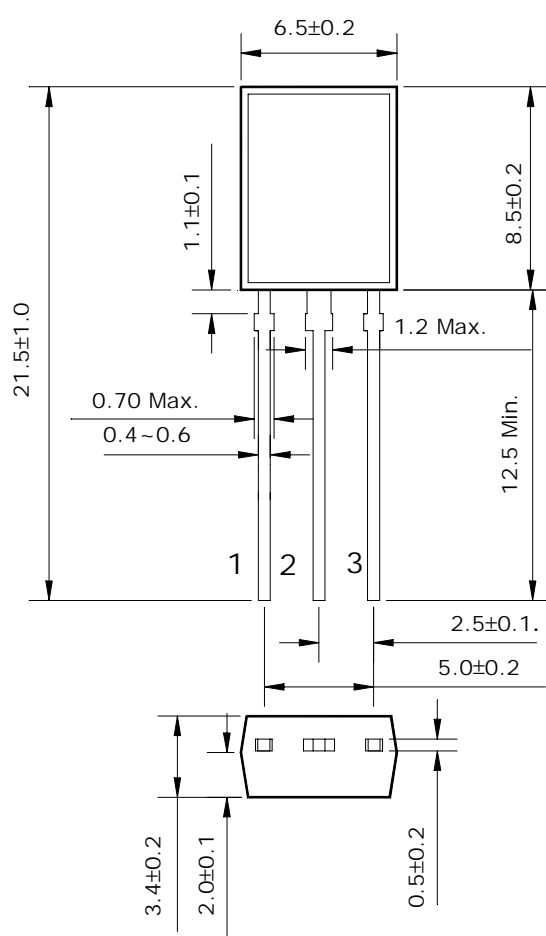
- Collector-Emitter voltage $V_{CEO} = -300V$
- Complementary pair with STC344

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}	$I_C = -50\mu A, I_E = 0$	-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	85	-	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -20V, I_E = 0, f = 1MHz$	-	6	-	pF

Electrical Characteristic Curves

Fig. 1 $h_{FE} - I_C$

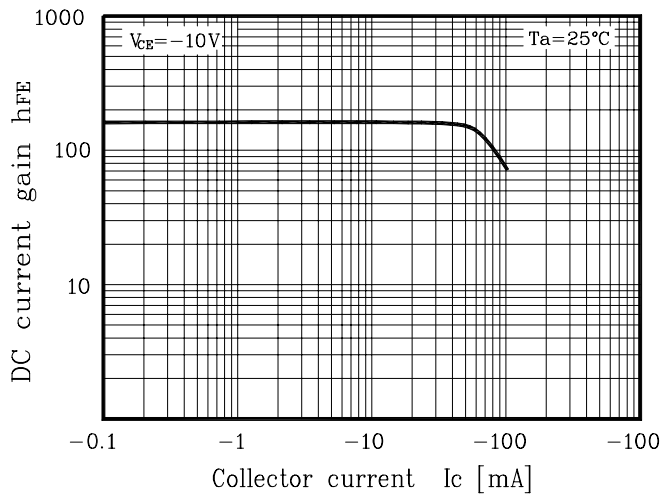


Fig. 2 $V_{CE(sat)} - I_C$

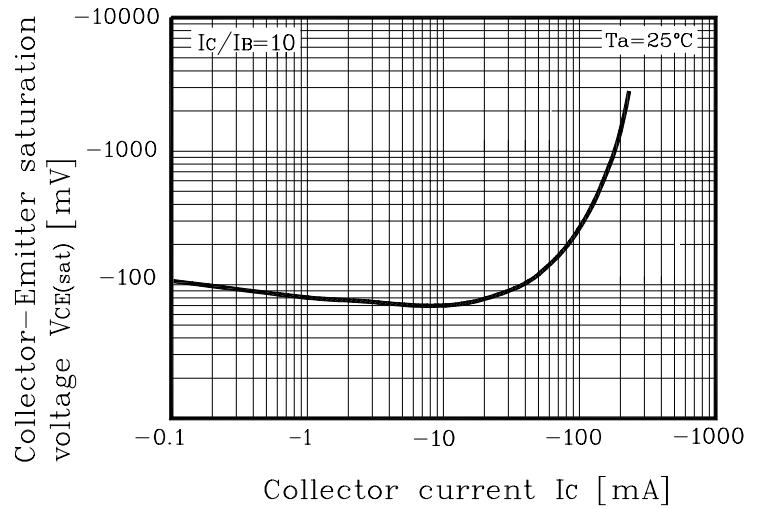


Fig. 3 $f_T - I_C$

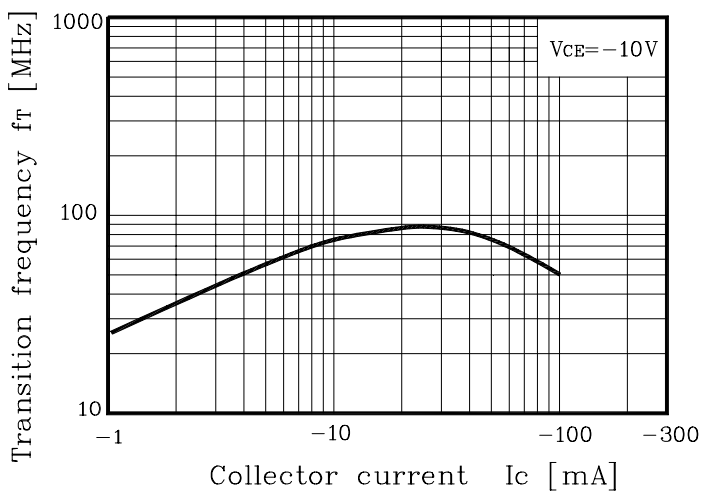


Fig. 4 $C_{ob} - V_R$

