



STC345L

NPN Silicon Transistor

Descriptions

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

Features

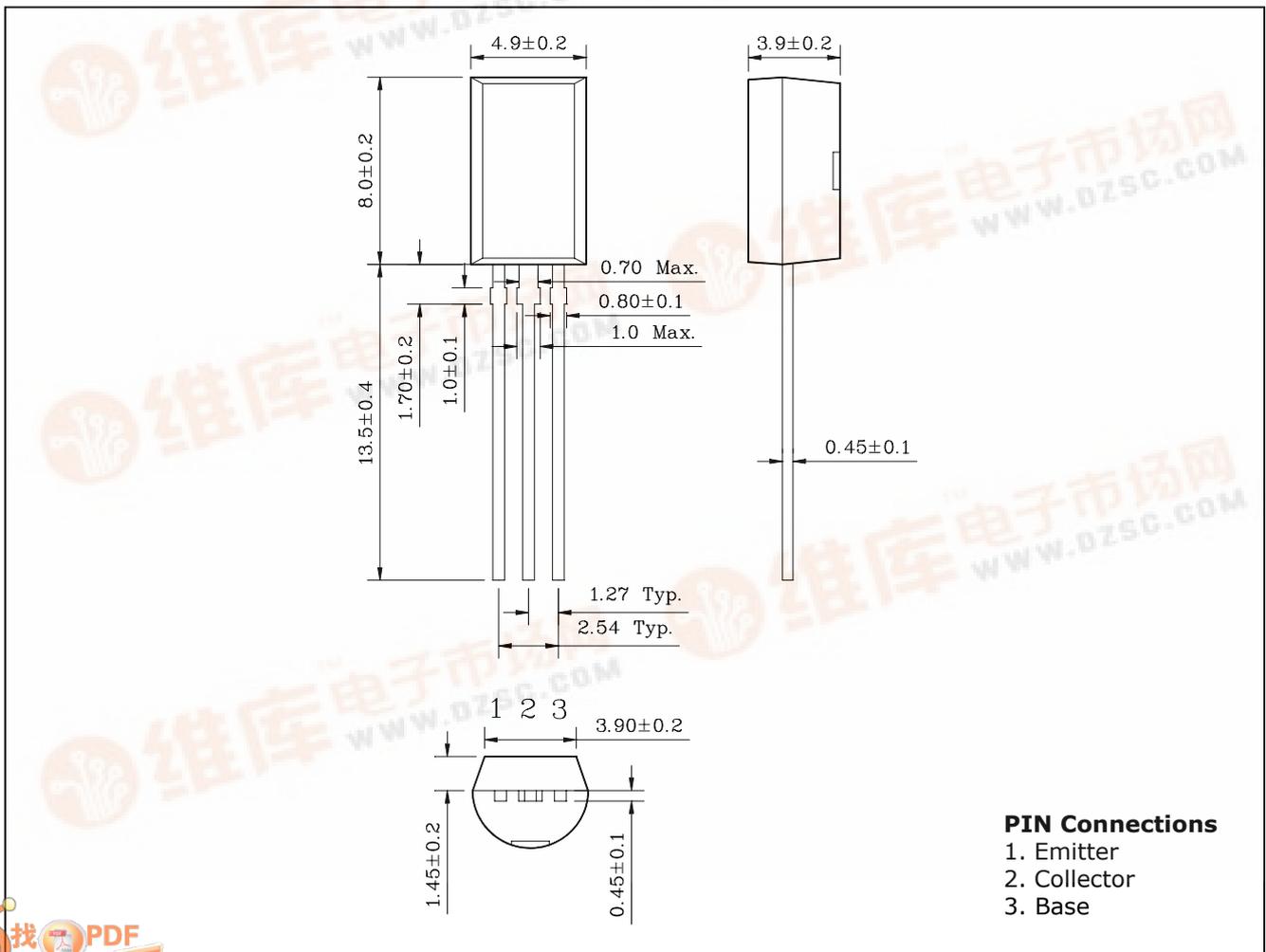
- Collector-Emitter voltage $V_{CEO}=300V$

Ordering Information

Type NO.	Marking	Package Code
STC345L	STC345	TO-92L

Outline Dimensions

unit : mm



STC345L

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
Base Current	I_B	20	mA
Collector dissipation	P_C	1	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 cut-off current	I_{CBO}	$V_{CB}=240V, I_E=0$	-	-	1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	1.0	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10V, I_C=0.5mA$	20	-	-	
	$h_{FE(2)}$	$V_{CE}=10V, I_C=20mA$	30	-	200	
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$	-	-	1.0	V
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA$	50	-	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=20V, I_E=0, f=1MHz$	-	3.0	-	pF

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Electrical Characteristic Curves

Fig. 1 $h_{FE} - I_C$

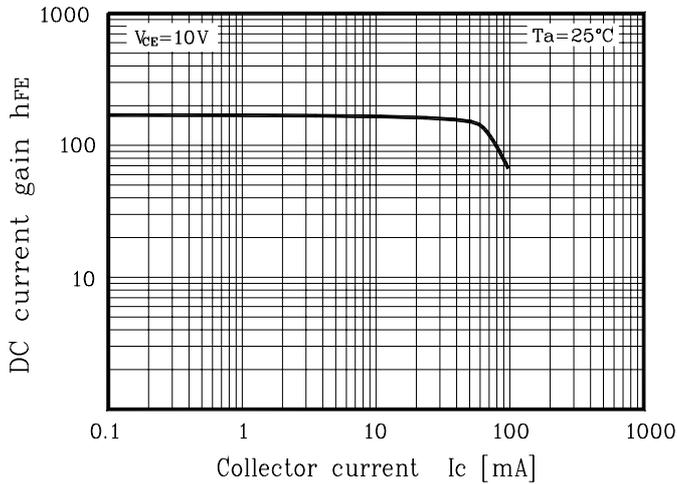


Fig. 2 $V_{CE(sat)} - I_C$

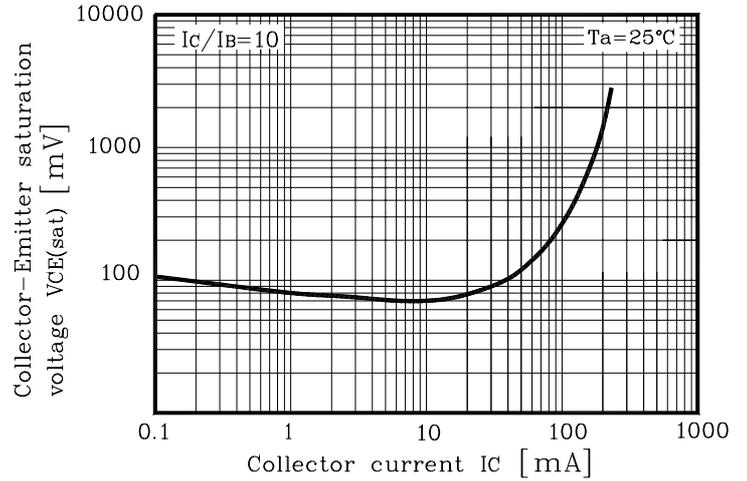


Fig. 3 $f_T - I_C$

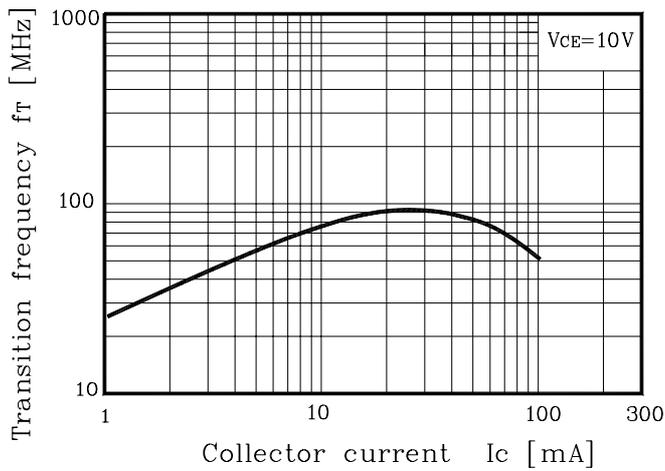


Fig. 4 $C_{Ob} - V_R$

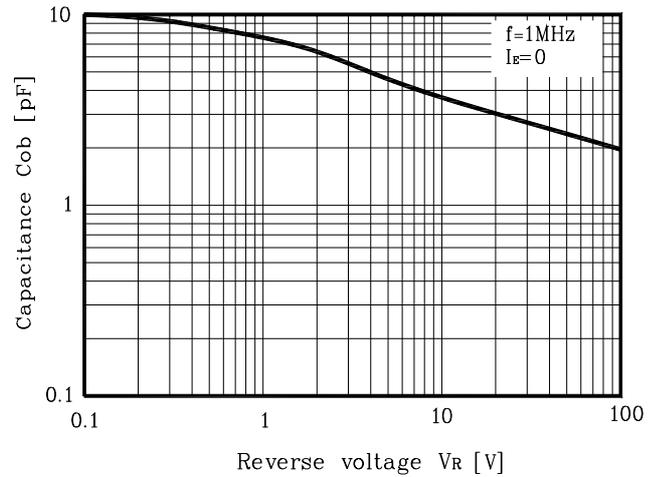


Fig. 5 Safe operating Area

