

# 2SC2594

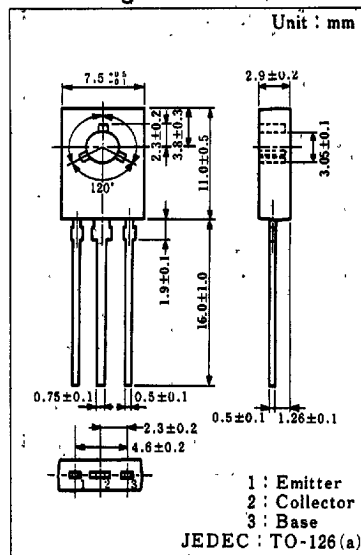
## Silicon NPN Epitaxial Planar Type

AF Power Amplifier  
For Strobo, Converter

### Features

- Low collector-emitter saturation voltage ( $V_{CE(sat)}$ )
- High performance and good operating characteristics at low supply voltage

### Package Dimensions



### Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

Item	Symbol	Value	Unit
Collector-base voltage	$V_{CBO}$	40	V
Collector-emitter voltage	$V_{CEO}$	20	V
Emitter-base voltage	$V_{EBO}$	7	V
Peak collector current	$I_{CP}$	7	A
Collector current	$I_C$	5	A
Collector power dissipation ( $T_c=25^\circ\text{C}$ )	$P_C$	10	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

### Electrical Characteristics ( $T_c=25^\circ\text{C}$ )

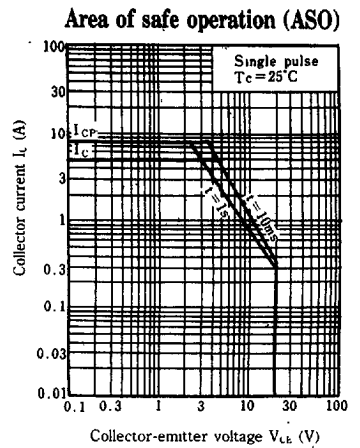
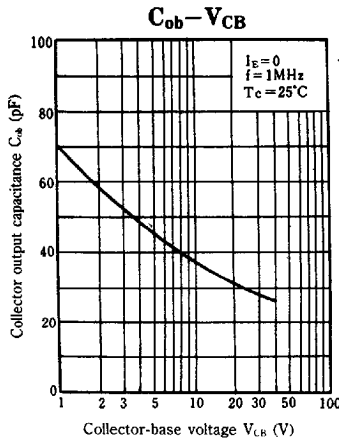
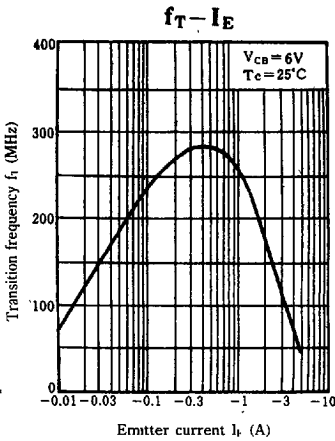
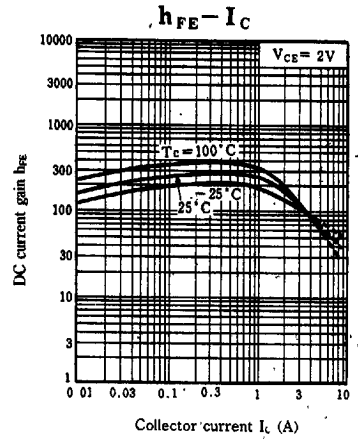
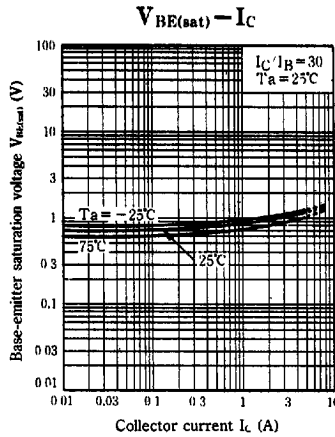
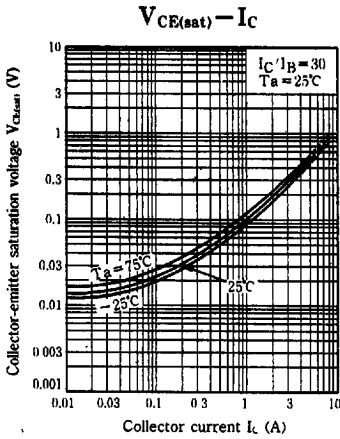
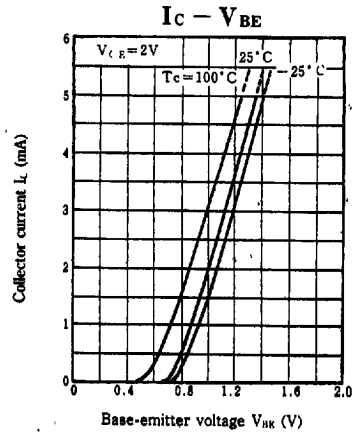
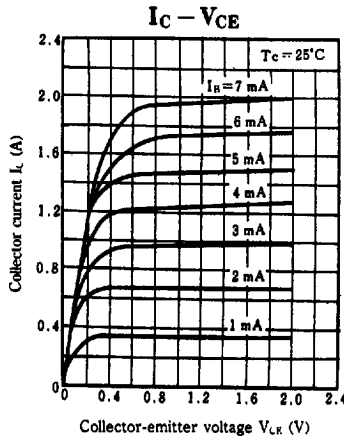
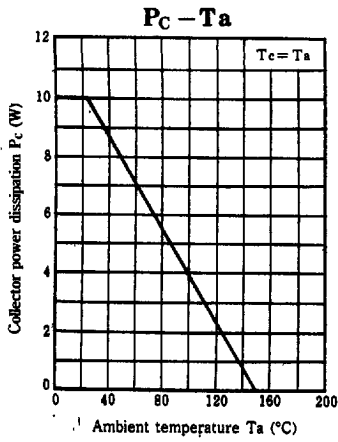
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB}=10\text{ V}, I_E=0$			0.1	$\mu\text{A}$
Collector-emitter voltage	$V_{CEO}$	$I_C=1\text{ mA}, I_B=0$	20			V
Collector-base voltage	$V_{EBO}$	$I_E=10\ \mu\text{A}, I_C=0$	7			V
DC current gain	$h_{FE1}$	$V_{CE}=2\text{ V}, I_C=0.5\text{ A}^*$	140		450	
	$h_{FE2}$	$V_{CE}=2\text{ V}, I_C=1\text{ A}^*$	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\text{ A}, I_B=0.1\text{ A}^*$			1	V
Transition frequency	$f_T$	$V_{CB}=6\text{ V}, I_E=-50\text{ mA}, f=200\text{ MHz}$		150		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20\text{ V}, I_E=0, f=1\text{ MHz}$			50	pF

\* Pulse measurement

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