

2SC2591, 2SC2592

Silicon NPN Epitaxial Planar Type

AF Driver, High Power Amplifier

Complementary Pair with 2SA1111, 2SA1112

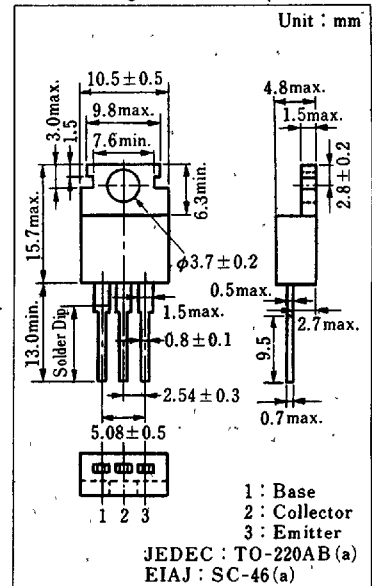
■ Features

- Very good linearity of DC current gain (h_{FE})
- High transition frequency (f_T)
- Optimum for the driver of 60~100W in complementary pair with 2SA1111 and 2SA1112

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

Item	Symbol	Value	Unit
Collector-base voltage	V_{CB0}	150	V
		180	
Collector-emitter voltage	V_{CE0}	150	V
		180	
Emitter-base voltage	V_{EB0}	5	V
Peak collector current	I_{CP}	1.5	A
Collector current	I_C	1	A
Collector power dissipation ($T_c=25^\circ\text{C}$)	P_C	20	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+150	$^\circ\text{C}$

■ Package Dimensions



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

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector-base voltage	V_{CB0}	$I_C=100\mu\text{A}$, $I_B=0$	150			V
			180			
Emitter-base voltage	V_{EB0}	$I_E=10\mu\text{A}$, $I_C=0$	5			V
DC current gain	h_{FE1}^*	$V_{CE}=10\text{V}$, $I_C=150\text{mA}$	90	160	330	
	h_{FE2}	$V_{CE}=5\text{V}$, $I_C=500\text{mA}$	50	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$		0.5	2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$		1	2	V
Transition frequency	f_T	$V_{CB}=10\text{V}$, $I_E=-50\text{mA}$, $f=200\text{MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		20	30	pF

* h_{FE1} Classifications

Class	Q	R	S
h_{FE1}	90~155	130~220	185~330

