

2SA1125

Silicon PNP Epitaxial Planar Type

AF High Voltage Amplifier

Complementary Pair with 2SC2633

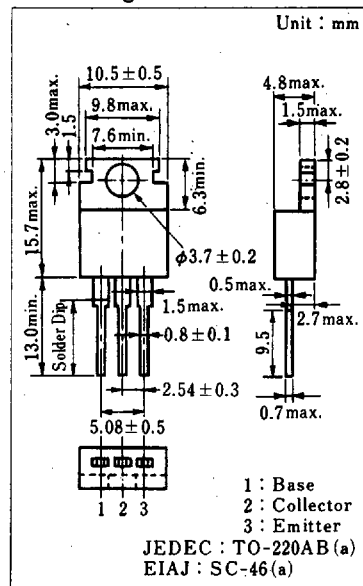
Features

- Very good linearity of DC current gain (h_{FE})
- High collector-emitter voltage (V_{CEO})
- Small collector output capacitance (C_{ob})
- 60~100W output pre-driver in complementary pair with 2SC2633

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

Item	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	-150	V
Collector-emitter voltage	V_{CEO}	-150	V
Emitter-base voltage	V_{EBO}	-5	V
Peak collector current	I_{CP}	-100	mA
Collector current	I_C	-50	mA
Collector power dissipation ($T_c=25^\circ\text{C}$)	P_C	1.5	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 cutoff current	I_{CBO}	$V_{CB} = -100\text{ V}, I_E = 0$			-1	μA
Collector-emitter voltage	V_{CEO}	$I_C = -0.1\text{ mA}, I_B = 0$	-150			V
Emitter-base voltage	V_{EBO}	$I_E = -10\text{ }\mu\text{A}, I_C = 0$	-5			V
DC current gain	h_{FE}^*	$V_{CE} = -5\text{ V}, I_C = -10\text{ mA}$	90		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -30\text{ mA}, I_B = -3\text{ mA}$			-1	V
Transition frequency	f_T	$V_{CB} = -10\text{ V}, I_E = 10\text{ mA}, f = 10\text{ MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$			5	pF

* h_{FE} Classifications

Class	Q	R	S	T
h_{FE}	90~155	130~220	185~330	260~450

