

# 2SC2633

## Silicon NPN Epitaxial Planar Type

AF High Voltage Amplifier  
Complementary Pair with 2SA1125

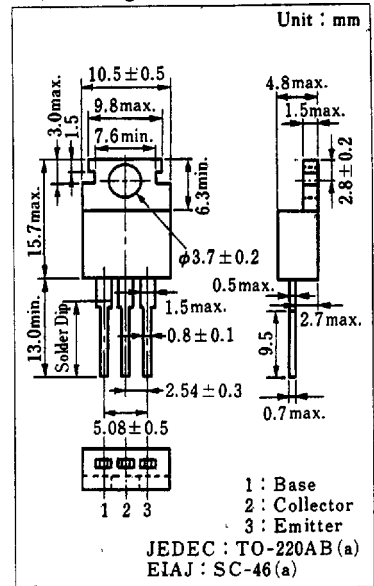
### ■ Features

- Good linearity of DC current gain ( $h_{FE}$ )
- High collector-emitter voltage ( $V_{CE0}$ )
- Small collector output capacitance ( $C_{ob}$ )

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

Item	Symbol	Value	Unit
Collector-base voltage	$V_{CB0}$	150	V
Collector-emitter voltage	$V_{CE0}$	150	V
Emitter-base voltage	$V_{EB0}$	5	V
Peak collector current	$I_{CP}$	100	mA
Collector current	$I_C$	50	mA
Collector power dissipation	$P_C$	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	$\mu\text{A}$
Emitter cutoff current	$V_{CE0}$	$I_C=0.1\text{ mA}, I_B=0$	150			V
Collector-base voltage	$V_{EB0}$	$I_E=10\ \mu\text{A}, I_C=0$	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	$f_T$	$V_{CB}=10\text{ V}, I_E=-10\text{ mA}, f=200\text{ MHz}$		160		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{ V}, I_E=0, f=1\text{ MHz}$			3	pF

### \* $h_{FE}$ Classifications

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

