

# 2SB861

Silicon PNP Triple Diffused

# HITACHI

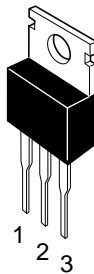
ADE-208-862 (Z)  
1st. Edition  
Sep. 2000

## Application

Low frequency power amplifier color TV vertical deflection output complementary pair with 2SD1138

## Outline

TO-220AB



1. Base
2. Collector (Flange)
3. Emitter

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

Item	Symbol	Rating	Unit
Collector to base voltage	$V_{\text{CBO}}$	-200	V
Collector to emitter voltage	$V_{\text{CEO}}$	-150	V
Emitter to base voltage	$V_{\text{EBO}}$	-6	V
Collector current	$I_{\text{C}}$	-2	A
Collector peak current	$I_{\text{C(peak)}}$	-5	A
Collector power dissipation	$P_{\text{C}}$	1.8	W
	$P_{\text{C}}^{*1}$	30	W
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-45 to +150	$^\circ\text{C}$

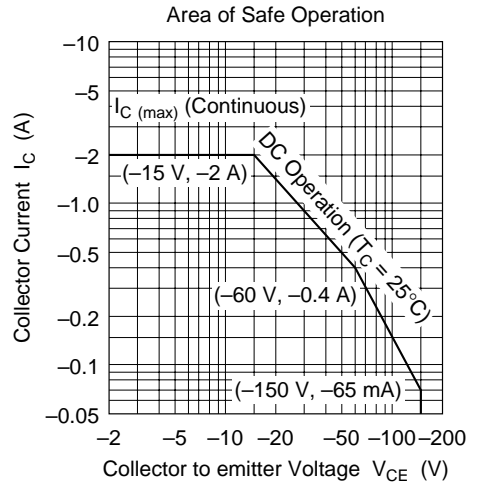
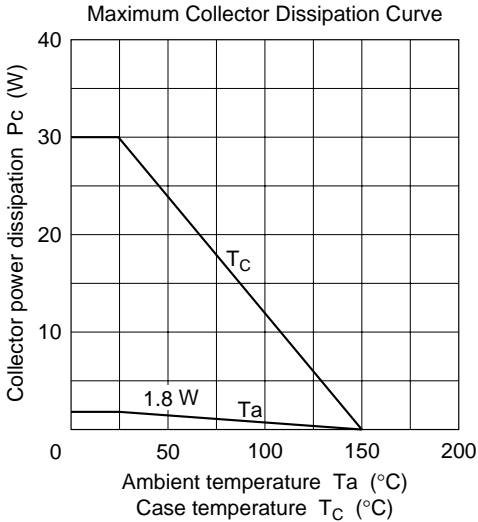
Note: 1. Value at  $T_{\text{c}} = 25^\circ\text{C}$

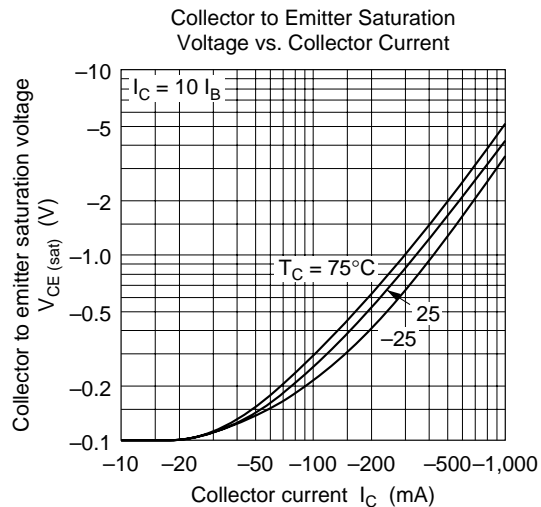
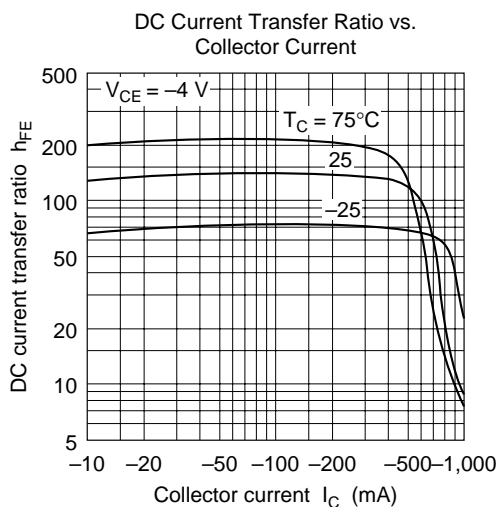
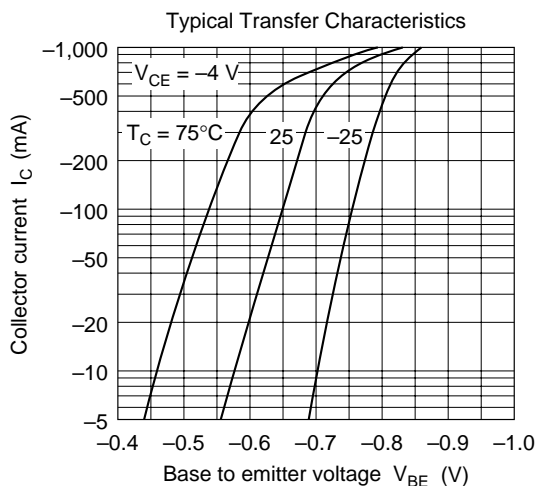
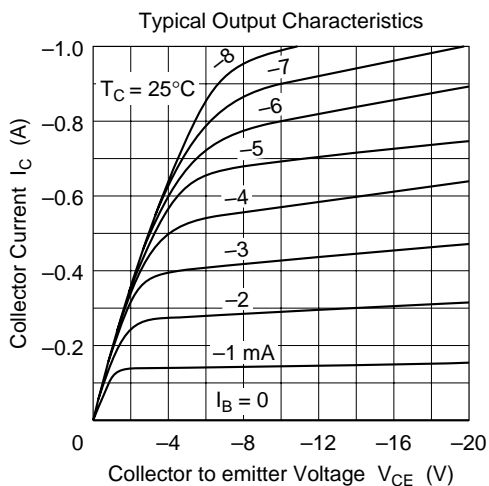
## Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CBO}$	-150	—	—	V	$I_C = -50 \text{ mA}$ , $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-6	—	—	V	$I_E = -5 \text{ mA}$ , $I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	-1	$\mu\text{A}$	$V_{CB} = -120 \text{ V}$ , $I_E = 0$
DC current transfer ratio	$h_{FE1}^{*1}$	60	—	200		$V_{CE} = -4 \text{ V}$ , $I_C = -50 \text{ mA}$
	$h_{FE2}$	60	—	—		$V_{CE} = -10 \text{ V}$ , $I_C = -500 \text{ mA}^{*2}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-3	V	$I_C = -500 \text{ mA}$ , $I_B = -50 \text{ mA}$
Base to emitter voltage	$V_{BE}$	—	—	-1	V	$V_{CE} = -4 \text{ V}$ , $I_C = -50 \text{ mA}$
Collector output capacitance	$C_{ob}$	—	30	—	pF	$V_{CB} = -100 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$

Notes: 1. The 2SB861 is grouped by  $h_{FE1}$  as follows.  
2. Pulse test

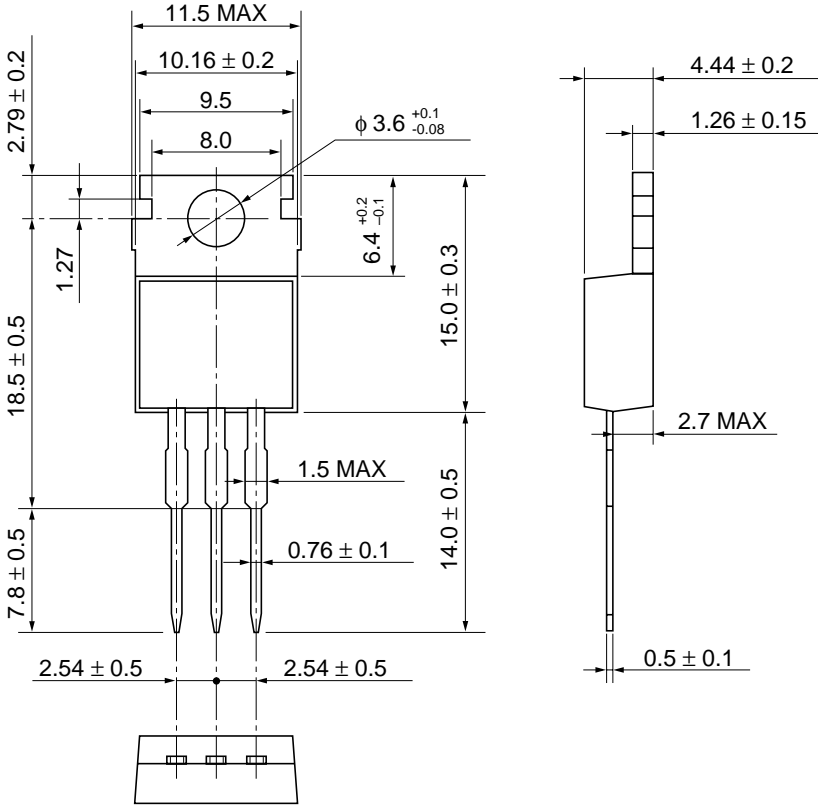
B	C
60 to 120	100 to 200





Package Dimensions

Unit: mm



Hitachi Code	TO-220AB
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	1.8 g

## Cautions

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