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# 2SB562

Silicon PNP Epitaxial

# HITACHI

ADE-208-1024 (Z)  
1st. Edition  
Mar. 2001

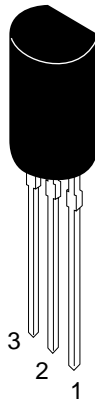
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## Application

- Low frequency power amplifier
- Complementary pair with 2SD468

## Outline

TO-92MOD



1. Emitter
2. Collector
3. Base

**Absolute Maximum Ratings** (Ta = 25°C)

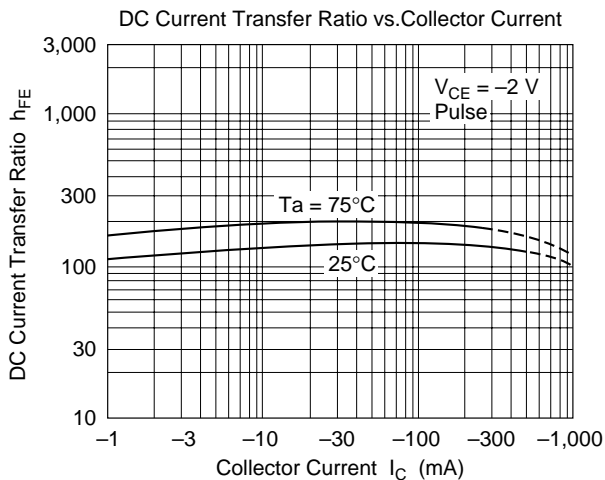
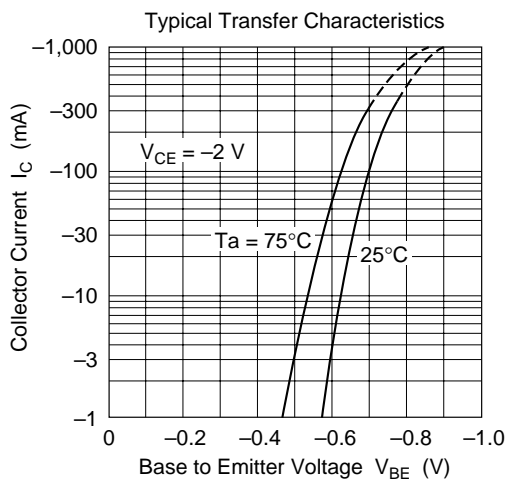
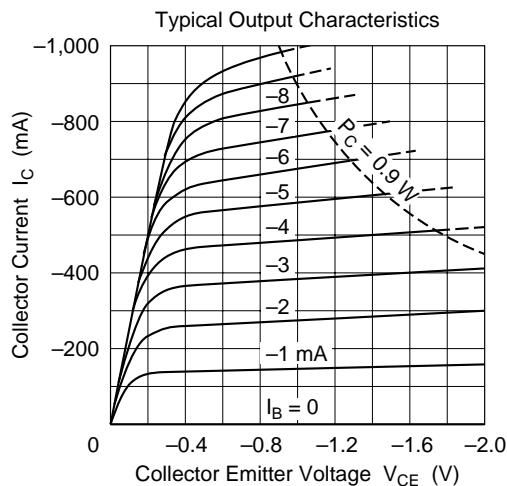
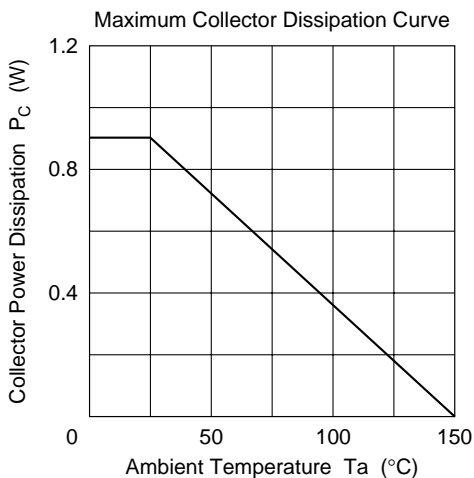
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-25	V
Collector to emitter voltage	$V_{CEO}$	-20	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-1.0	A
Collector peak current	$i_{C(peak)}$	-1.5	A
Collector power dissipation	$P_C$	0.9	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

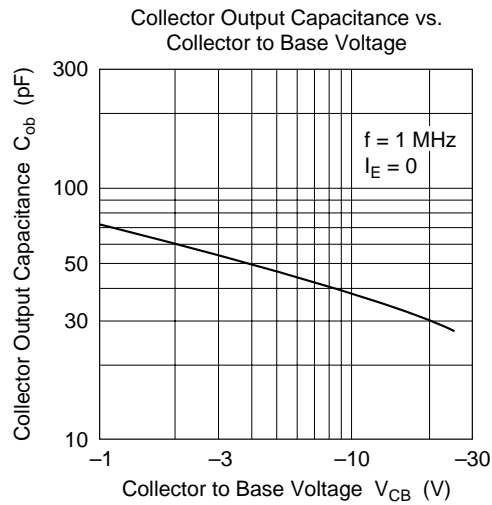
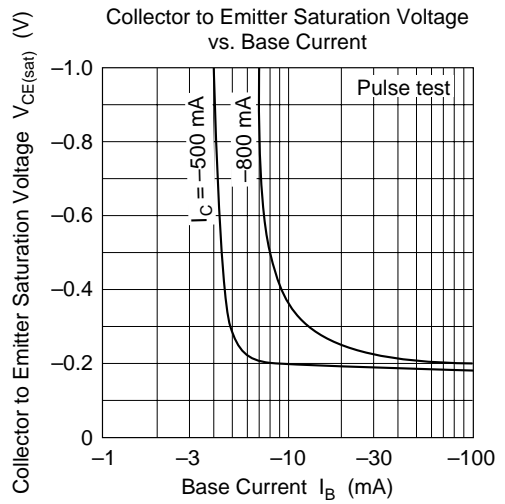
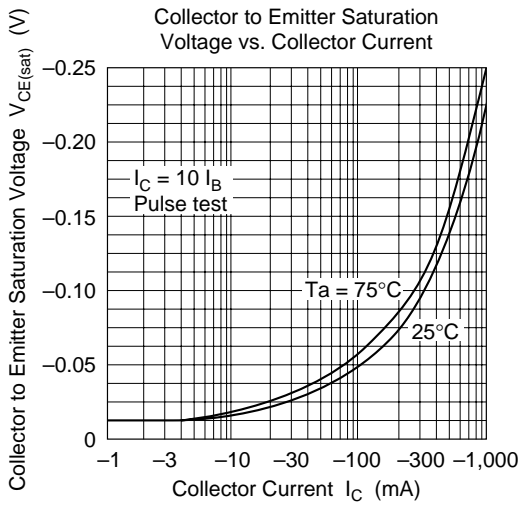
**Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-25	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-20	—	—	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	-1.0	$\mu A$	$V_{CB} = -20 \text{ V}, I_E = 0$
DC current transfer ratio	$h_{FE}^{*1}$	85	—	240		$V_{CE} = -2 \text{ V},$ $I_C = -0.5 \text{ A (Pulse test)}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	-0.2	-0.5	V	$I_C = -0.8 \text{ A},$ $I_B = -0.08 \text{ A (Pulse test)}$
Base to emitter voltage	$V_{BE}$	—	-0.8	-1.0	V	$V_{CE} = -2 \text{ V},$ $I_C = -0.5 \text{ A (Pulse test)}$
Gain bandwidth product	$f_T$	—	350	—	MHz	$V_{CE} = -2 \text{ V},$ $I_C = -0.5 \text{ A (Pulse test)}$
Collector output capacitance	$C_{ob}$	—	38	—	pF	$V_{CB} = -10 \text{ V}, I_E = 0$ $f = 1 \text{ MHz}$

Note: 1. The 2SB562 is grouped by  $h_{FE}$  as follows.

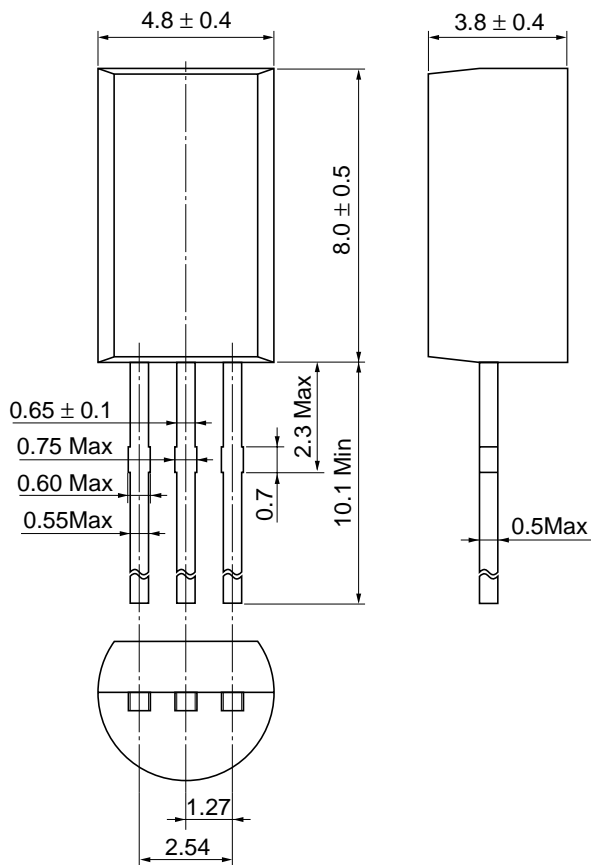
B	C
85 to 170	120 to 240





Package Dimensions

As of January, 2001  
Unit: mm



Hitachi Code	TO-92 Mod
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.35 g

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