# 2SB562

## Silicon PNP Epitaxial

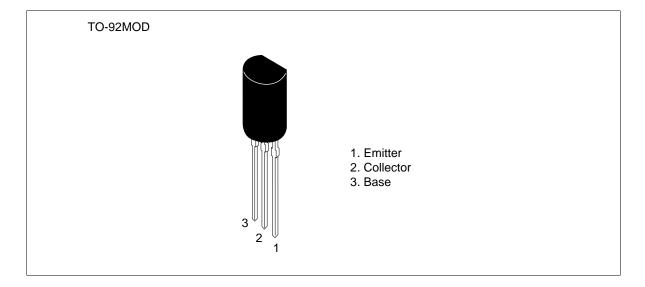
# **HITACHI**

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

### Application

- Low frequency power amplifier
- Complementary pair with 2SD468

#### Outline





## 2SB562

### **Absolute Maximum Ratings** $(Ta = 25^{\circ}C)$

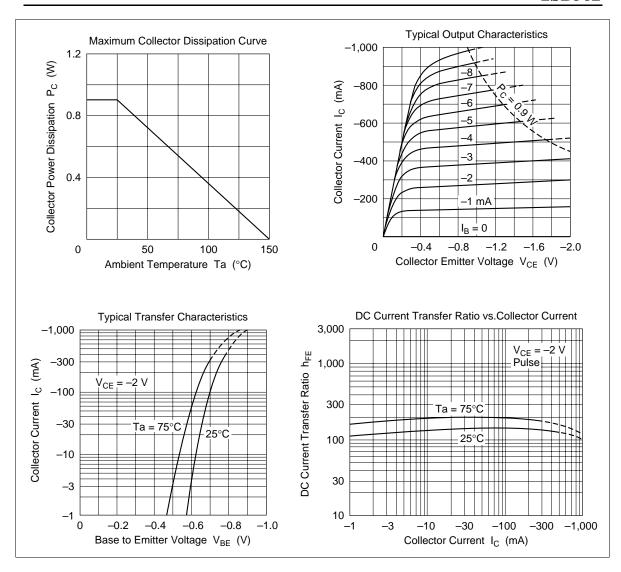
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{\text{CBO}}$	<b>–</b> 25	V
Collector to emitter voltage	$V_{\text{CEO}}$	-20	V
Emitter to base voltage	$V_{EBO}$	<b>–</b> 5	V
Collector current	I <sub>c</sub>	-1.0	A
Collector peak current	i <sub>C(peak)</sub>	-1.5	A
Collector power dissipation	P <sub>c</sub>	0.9	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

#### **Electrical Characteristics** ( $Ta = 25^{\circ}C$ )

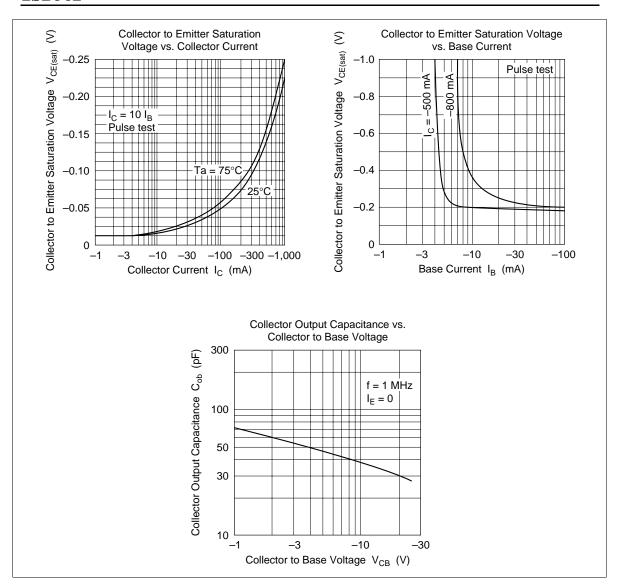
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-25	_	_	V	$I_{c} = -10 \ \mu\text{A}, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-20	_	_	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	<b>-</b> 5	_	_	V	$I_E = -10 \ \mu A, \ I_C = 0$
Collector cutoff current	I <sub>CBO</sub>	_	_	-1.0	μΑ	$V_{CB} = -20 \text{ V}, I_{E} = 0$
DC current transfer ratio	h <sub>FE</sub> *1	85	_	240		$V_{CE} = -2 \text{ V},$ $I_{C} = -0.5 \text{ A (Pulse test)}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	-0.2	-0.5	V	$I_{\rm C} = -0.8 \text{ A},$ $I_{\rm B} = -0.08 \text{ A} \text{ (Pulse test)}$
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 <sub>T</sub>	_	350	_	MHz	$V_{CE} = -2 \text{ V},$ $I_{C} = -0.5 \text{ A (Pulse test)}$
Collector output capacitance	Cob	_	38	_	pF	$V_{CB} = -10 \text{ V}, I_{E} = 0$ f = 1 MHz

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

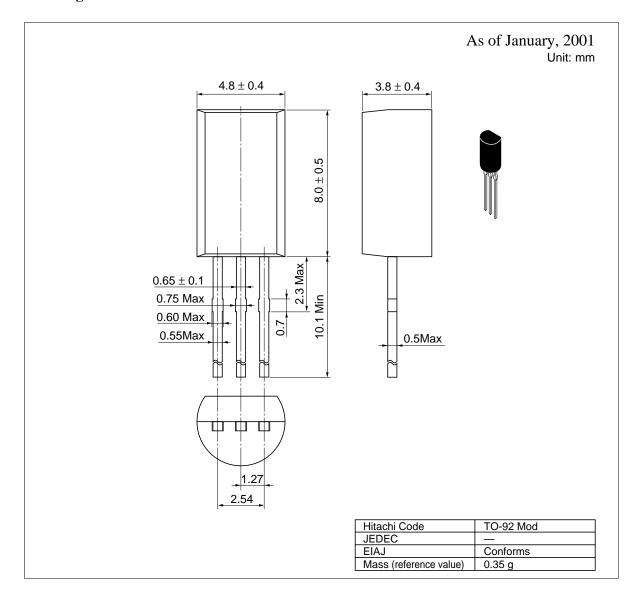
В	С
85 to 170	120 to 240



#### 2SB562



#### **Package Dimensions**



#### **Cautions**

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## IITACE

Semiconductor & Integrated Circuits. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

URL NorthAmerica : http://semiconductor.hitachi.com/ Europe http://www.hitachi-eu.com/hel/ecg Asia http://sicapac.hitachi-asia.com Japan http://www.hitachi.co.jp/Sicd/indx.htm

#### For further information write to:

Hitachi Semiconductor (America) Inc. 179 East Tasman Drive, San Jose,CA 95134 Tel: <1> (408) 433-1990 Germany

Hitachi Europe GmbH Electronic Components Group Dornacher Straße 3 D-85622 Feldkirchen, Munich Fax: <1>(408) 433-0223 Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00

> Hitachi Europe Ltd. Electronic Components Group. Whitebrook Park Lower Cookham Road Maidenhead Berkshire SL6 8YA, United Kingdom Tel: <886>-(2)-2718-3666 Tel: <44> (1628) 585000 Fax: <44> (1628) 585160

Hitachi Asia Ltd. Hitachi Tower 16 Collyer Quay #20-00, Singapore 049318 Tel: <65>-538-6533/538-8577

Fax: <65>-538-6933/538-3877 URL: http://www.hitachi.com.sg

(Taipei Branch Office) 4/F, No. 167, Tun Hwa North Road, Hung-Kuo Building. Taipei (105), Taiwan

Fax: <886>-(2)-2718-8180 Telex: 23222 HAS-TP URL: http://www.hitachi.com.tw Hitachi Asia (Hong Kong) Ltd. Group III (Electronic Components) 7/F., North Tower, World Finance Centre, Harbour City, Canton Road Tsim Sha Tsui, Kowloon,

Hong Kong Tel: <852>-(2)-735-9218 Fax: <852>-(2)-730-0281 URL: http://www.hitachi.com.hk

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