
2SB561

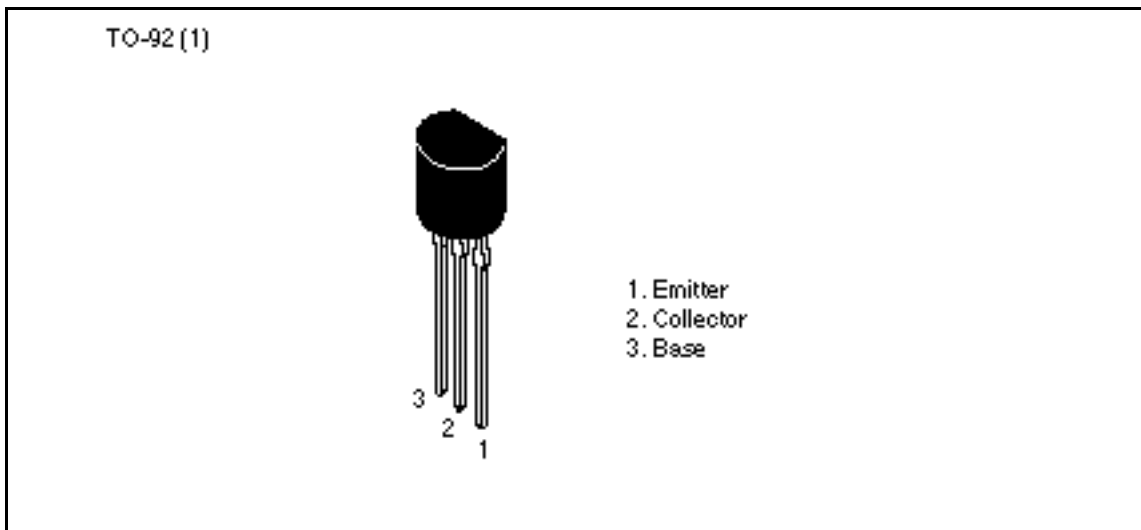
Silicon PNP Epitaxial

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Application

- Low frequency power amplifier
- Complementary pair with 2SD467

Outline



2SB561

Absolute Maximum Ratings (Ta = 25°C)

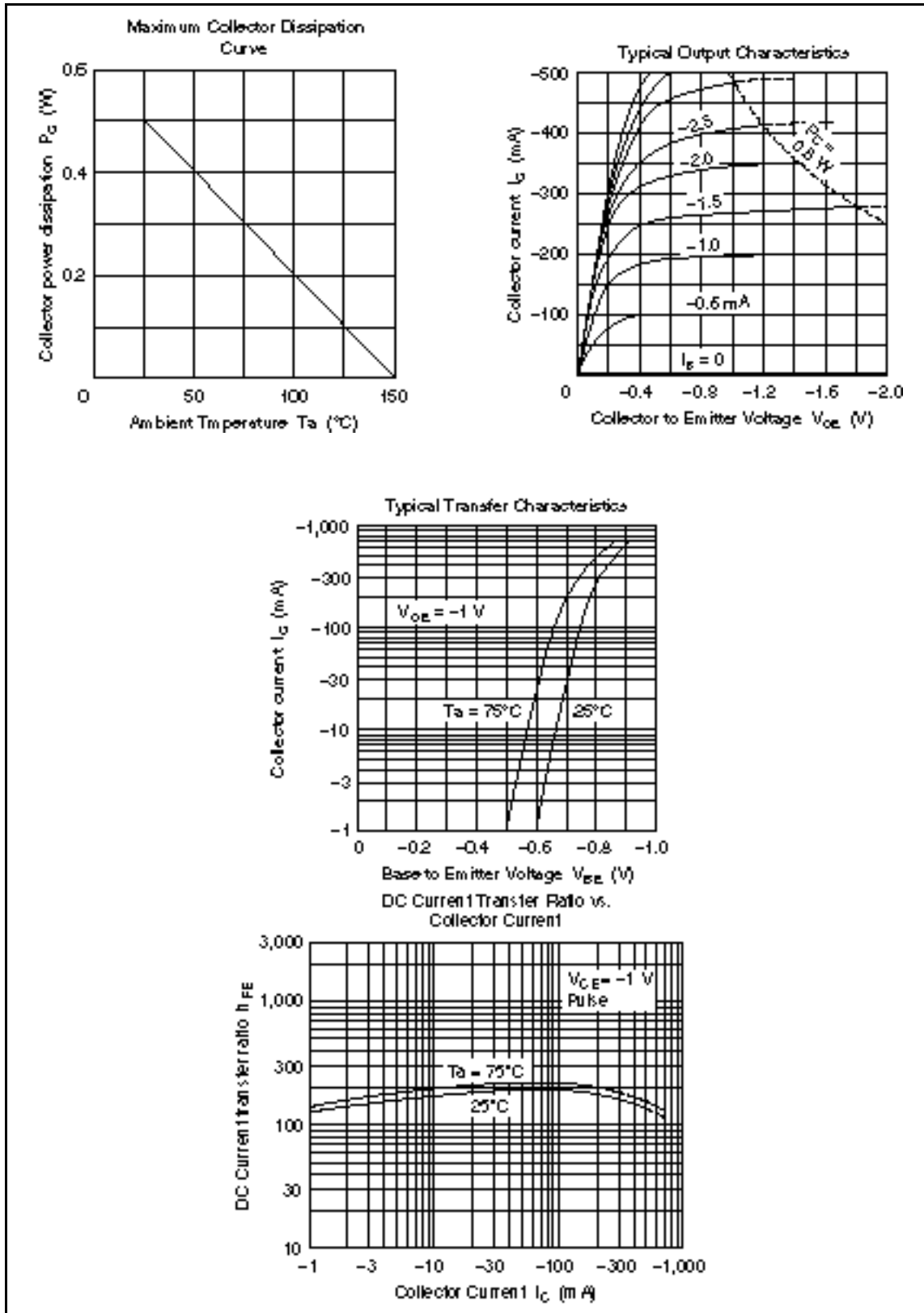
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-25	V
Collector to emitter voltage	V_{CEO}	-20	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-0.7	A
Collector peak current	$i_{C(peak)}$	-1.0	A
Collector power dissipation	P_C	0.5	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

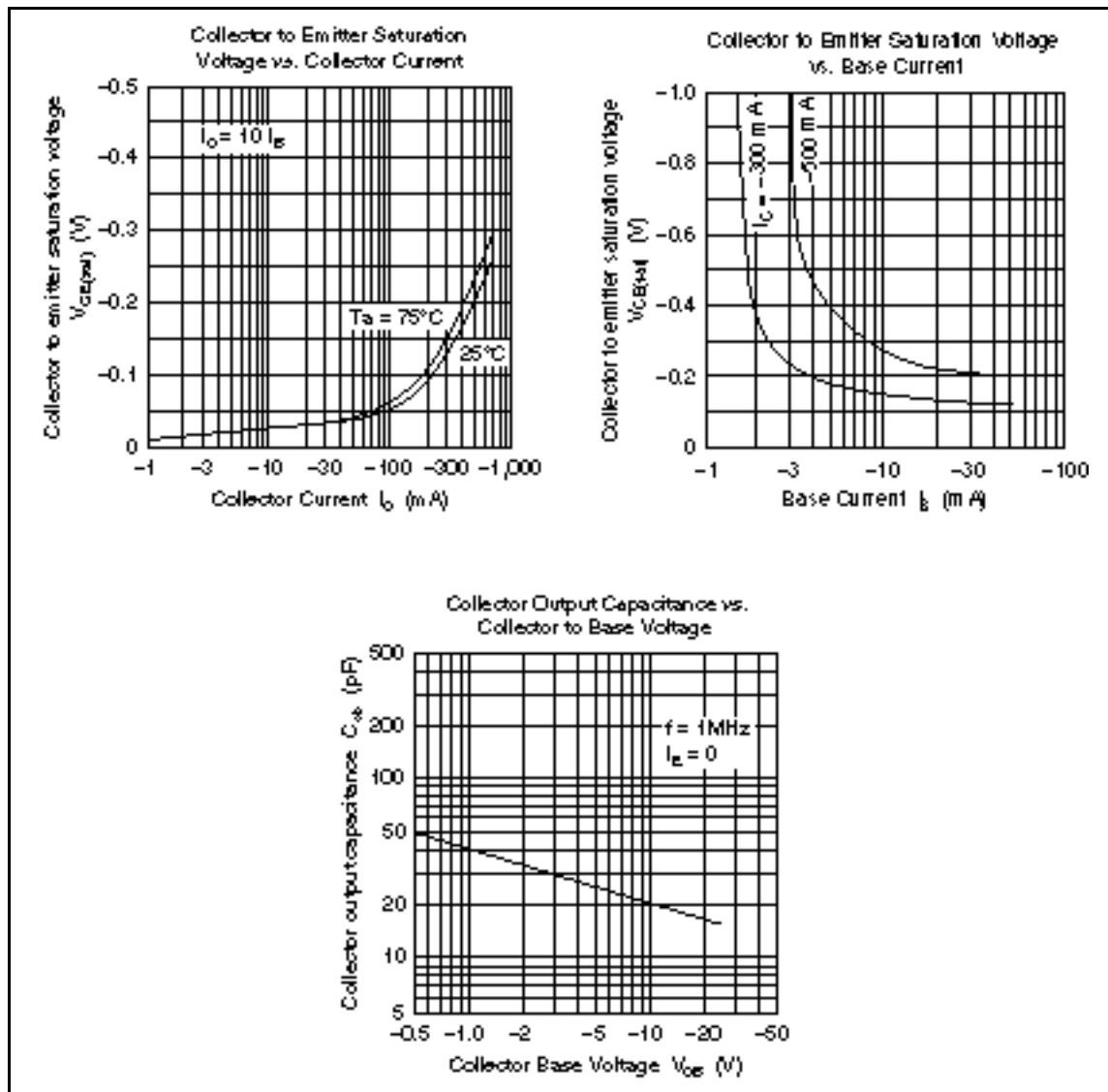
Electrical Characteristics (Ta = 25°C)

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	$I_C = -1 \text{ mA}, R_{BE} =$
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	μA	$V_{CB} = -20 \text{ V}, I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	85	—	240		$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}$ (Pulse test)
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	-0.2	-0.5	V	$I_C = -0.5 \text{ A}, I_B = -0.05 \text{ A}$
Base to emitter voltage	V_{BE}	—	-0.75	-1.0	V	$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}$
Gain bandwidth product	f_T	—	350	—	MHz	$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}$
Collector output capacitance	C_{ob}	—	20	—	pF	$V_{CB} = -10 \text{ V}, I_E = 0$ $f = 1 \text{ MHz}$

Note: 1. The 2SB561 is grouped by h_{FE} as follows.

B	C
85 to 170	120 to 240





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HITACHI

Hitachi, Ltd.

Semiconductor & IC Div.

Nippon Bldg., 2-5-2, Ohite-machi, Chiyoda-ku, Tokyo 100, Japan

Tel: Tokyo (03) 3270-2111

Fax: (03) 3270-5109

For further information write to:

Hitachi America, Ltd.
Semiconductor & IC Div.
2000 Sierra Point Parkway
Brisbane, CA 94005-4835
U.S.A.
Tel: 415-589-8000
Fax: 415-589-4207

Hitachi Europe GmbH
Electronic Components Group
Continental Europe
Dornacher Straße 3
D-85622 Feldkirchen
München
Tel: 089-9 94 80-0
Fax: 089-9 29 30 00

Hitachi Europe Ltd.
Electronic Components Div.
Northern Europe Headquarters
Whitebrook Park
Lower Cookham Road
Maidenhead
Berkshire SL6 8YA
United Kingdom
Tel: 0628-585000
Fax: 0628-778322

Hitachi Asia Pte. Ltd.
45 Collyer Quay #20-00
Hitachi Tower
Singapore 0104
Tel: 535-2100
Fax: 535-1533

Hitachi Asia (Hong Kong) Ltd.
Unit 705, North Tower,
World Finance Centre
Harbour City, Canton Road
Tsim Sha Tsui, Kowloon
Hong Kong
Tel: 27359218
Fax: 27308074