
2SD787, 2SD788

Silicon NPN Epitaxial

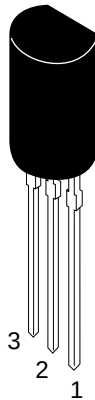
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Application

- Low frequency power amplifier
- Complementary pair with 2SB738 and 2SB739

Outline

TO-92MOD



1. Emitter
2. Collector
3. Base

2SD787, 2SD788

Absolute Maximum Ratings (Ta = 25°C)

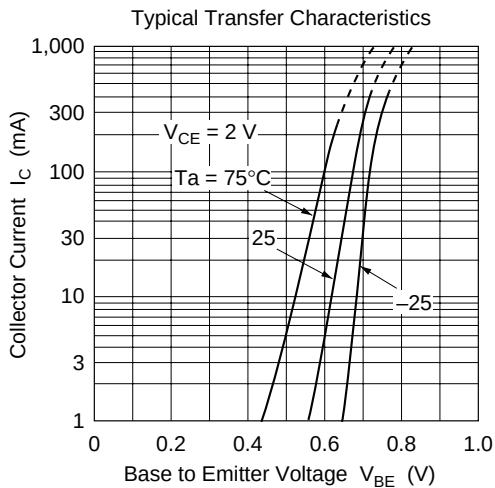
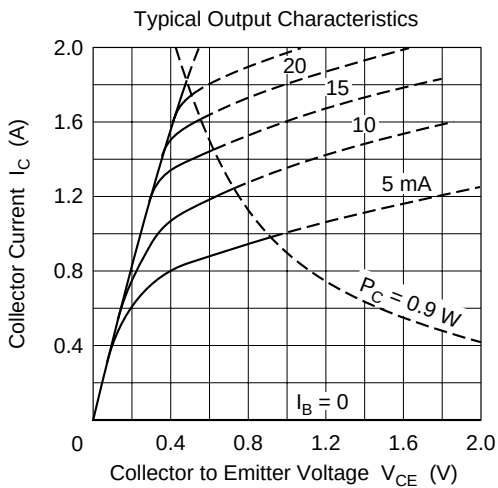
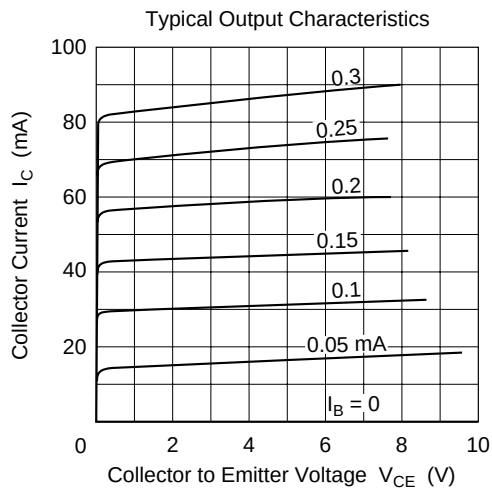
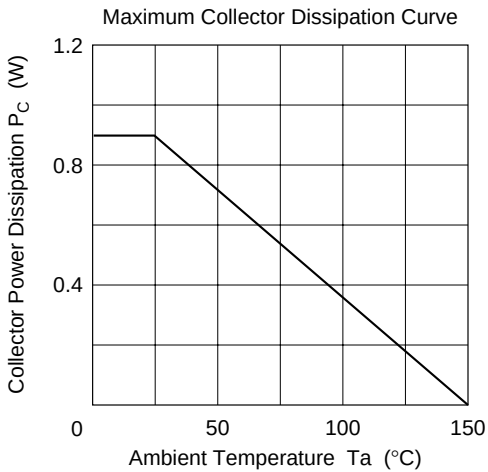
Item	Symbol	2SD787	2SD788	Unit
Collector to base voltage	V _{CBO}	20	20	V
Collector to emitter voltage	V _{CEO}	16	20	V
Emitter to base voltage	V _{EBO}	6	6	V
Collector current	I _C	2	2	A
Collector power dissipation	P _C	0.9	0.9	W
Junction temperature	T _j	150	150	°C
Storage temperature	T _{stg}	−55 to +150	−50 to +150	°C

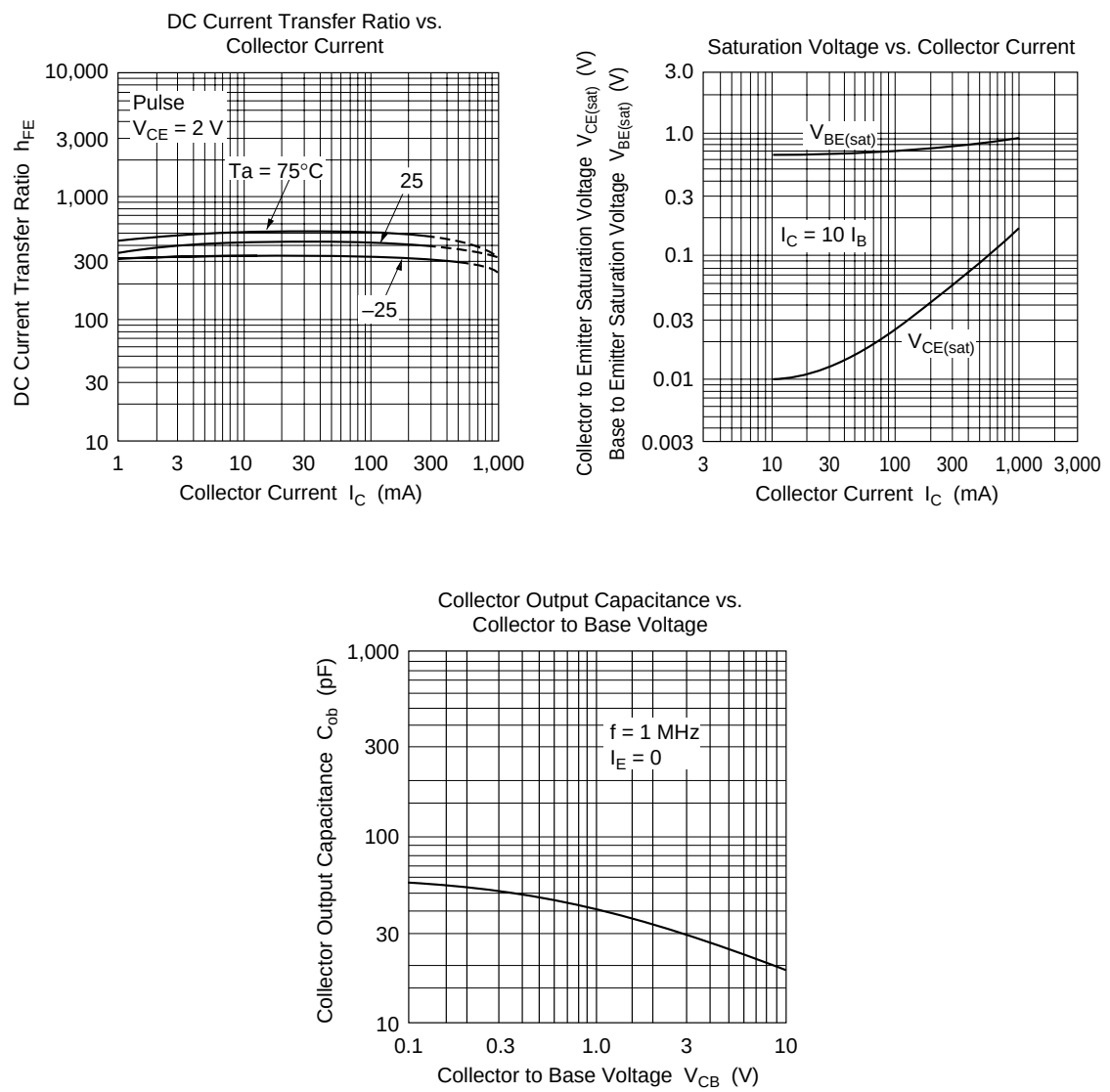
Electrical Characteristics (Ta = 25°C)

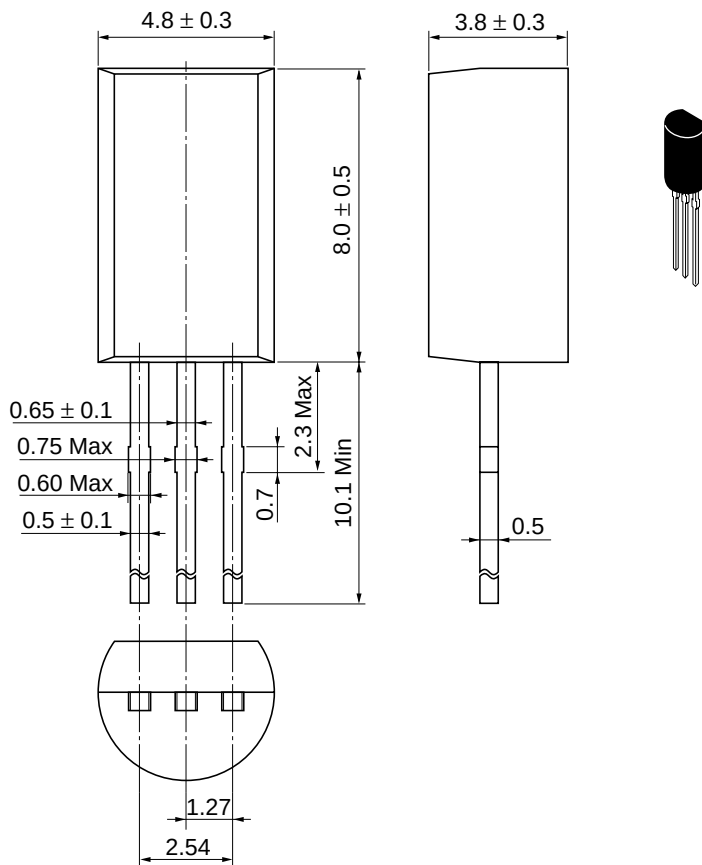
Item	Symbol	2SD787			2SD788			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	V _{(BR)CBO}	20	—	—	20	—	—	V	I _C = 10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	16	—	—	20	—	—	V	I _C = 1 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	6	—	—	6	—	—	V	I _E = 10 μA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	2	—	—	2	μA	V _{CB} = 16 V, I _E = 0
Emitter cutoff current	I _{EBO}	—	—	0.2	—	—	0.2	μA	V _{EB} = 6 V, I _C = 0
DC current transfer ratio	h _{FE} * ¹	100	—	800	100	—	800		V _{CE} = 2 V, I _C = 0.1 A
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	0.3	—	—	0.3	V	I _C = 1 A, I _B = 0.1 A
Gain bandwidth product	f _T	—	100	—	—	100	—	MHz	V _{CE} = 2 V, I _C = 10 mA
Collector output capacitance	C _{ob}	—	20	—	—	20	—	pF	V _{CB} = 10 V, I _E = 0, f = 1 MHz

Note: 1. The 2SD787 and 2SD788 are grouped by h_{FE} as follows.

B	C	D	E
100 to 200	160 to 320	250 to 500	400 to 800







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

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Hitachi, Ltd.

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

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For further information write to:

Hitachi Semiconductor (America) Inc. 179 East Tasman Drive, San Jose, CA 95134 Tel: <1> (408) 433-1990 Fax: <1> (408) 433-0223	Hitachi Europe GmbH Electronic components Group Dornacher Straße 3 D-85622 Feldkirchen, Munich Germany 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: <44> (1628) 585000 Fax: <44> (1628) 778322
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Hitachi Asia Pte. Ltd. 16 Collyer Quay #20-00 Hitachi Tower Singapore 049318 Tel: 535-2100 Fax: 535-1533 Hitachi Asia Ltd. Taipei Branch Office 3F, Hung Kuo Building. No.167, Tun-Hwa North Road, Taipei (105) Tel: <886> (2) 2718-3666 Fax: <886> (2) 2718-8180
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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 Telex: 40815 HITEC HX
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