
2SB1399

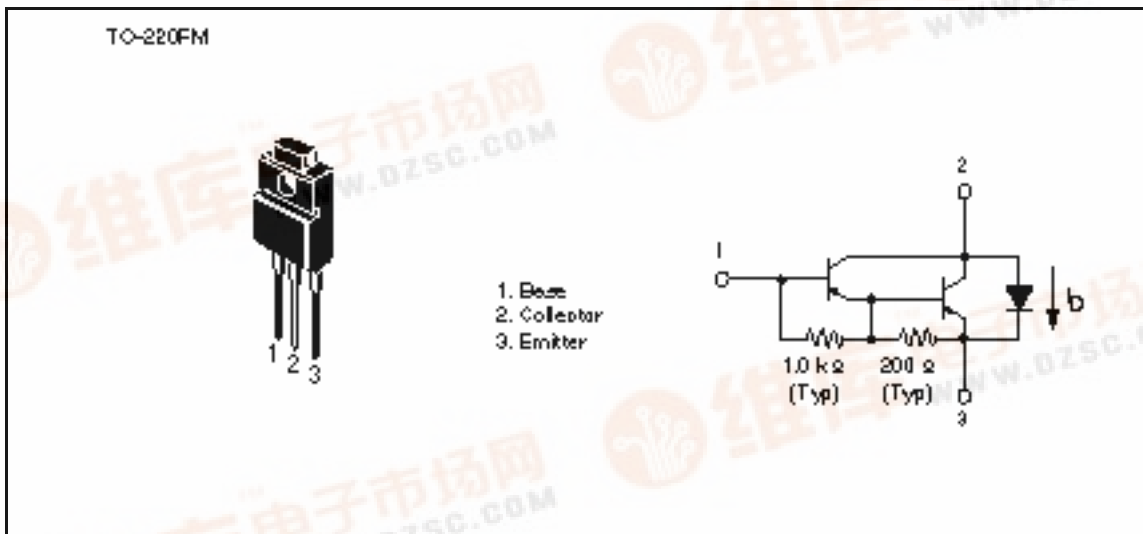
Silicon PNP Triple Diffused

HITACHI

Application

Low frequency power amplifier

Outline



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Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-120	V
Collector to emitter voltage	V_{CEO}	-120	V
Emitter to base voltage	V_{EBO}	-7	V
Collector current	I_C	-10	A
Collector peak current	$I_{C(peak)}$	-15	A
Collector power dissipation	P_C	2	W
	P_C^{*1}	30	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C
C to E diode forward current	I_D^{*1}	10	A

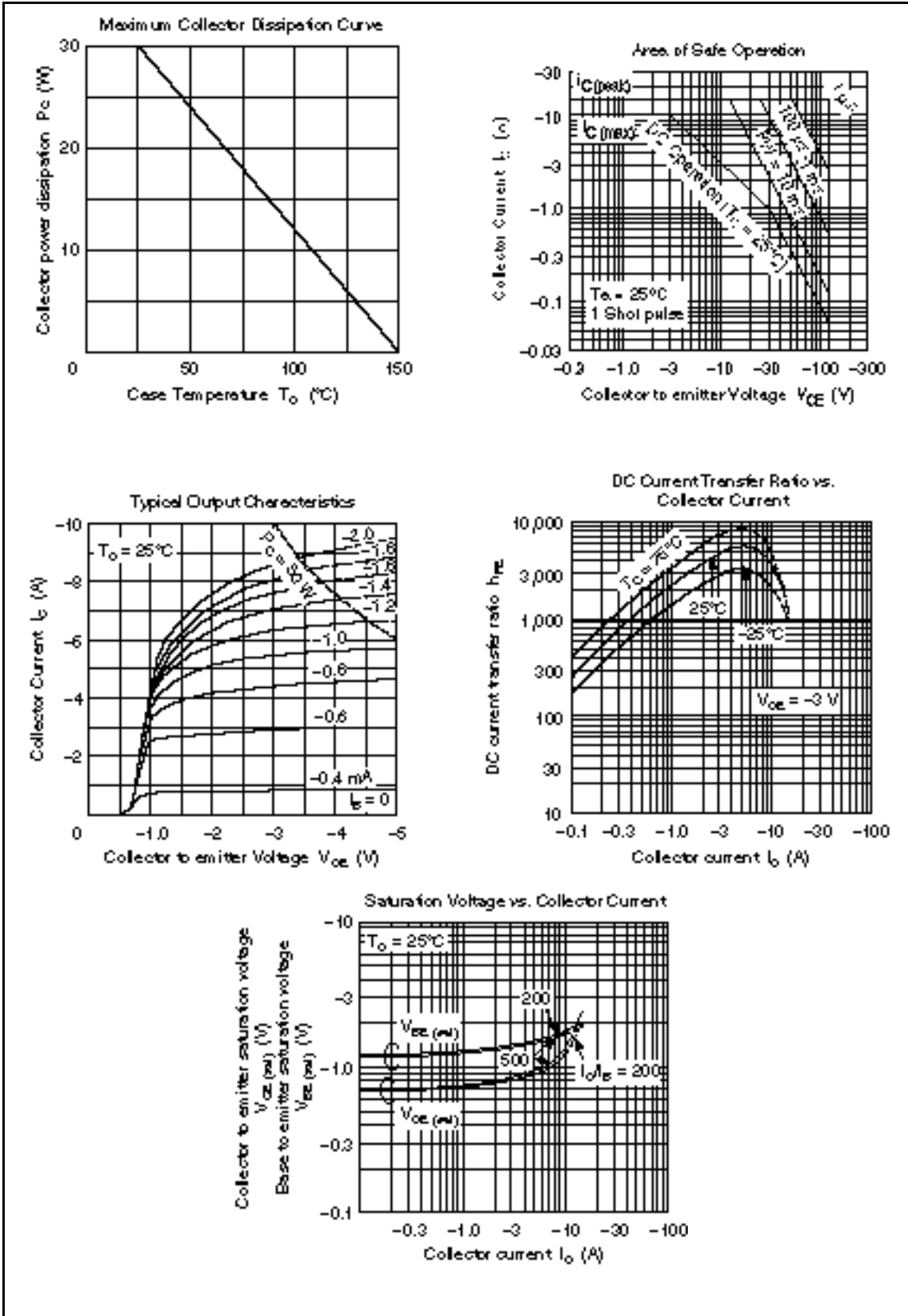
Note: 1. Value at $T_C = 25^\circ\text{C}$.

Electrical Characteristics (Ta = 25°C)

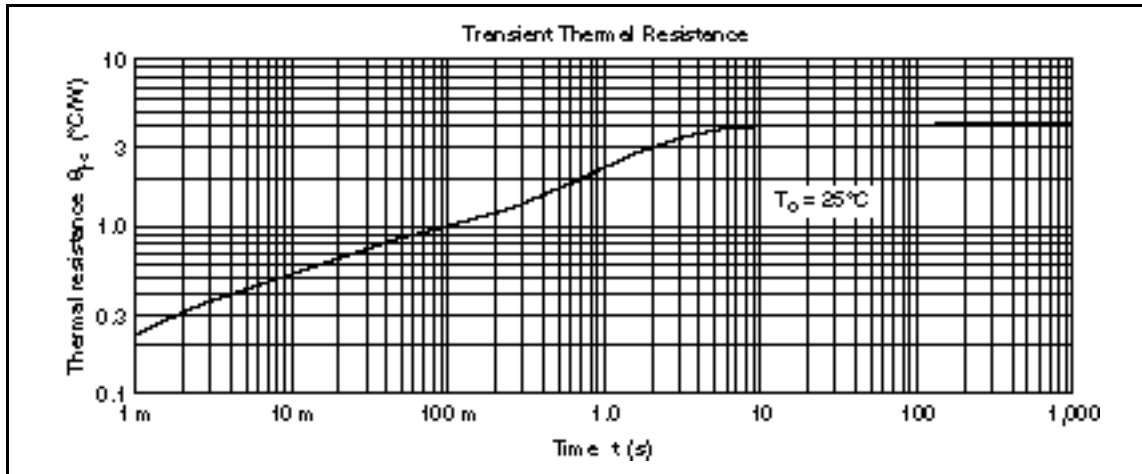
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-120	—	—	V	$I_C = -0.1\text{ mA}$, $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	—	—	V	$I_C = -25\text{ mA}$, $R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-7	—	—	V	$I_E = -50\text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-10	μA	$V_{CB} = -100\text{ V}$, $I_E = 0$
	I_{CEO}	—	—	-10		$V_{CE} = -100\text{ V}$, $R_{BE} =$
DC current transfer ratio	h_{FE}	1000	—	20000		$V_{CE} = -3\text{ V}$, $I_C = -5\text{ A}^{*1}$
Collector to emitter saturation voltage	$V_{CE(sat)1}$	—	—	-1.5	V	$I_C = -5\text{ A}$, $I_B = 10\text{ mA}^{*1}$
	$V_{CE(sat)2}$	—	—	-3.0		$I_C = -10\text{ A}$, $I_B = -100\text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)1}$	—	—	-2.0	V	$I_C = -5\text{ A}$, $I_B = 10\text{ mA}^{*1}$
	$V_{BE(sat)2}$	—	—	-3.5		$I_C = -10\text{ A}$, $I_B = -100\text{ mA}^{*1}$
C to E diode forward voltage	V_D	—	—	3.0	V	$I_D = 10\text{ A}^{*1}$

Note: 1. Pulse Test.

See switching characteristic curve of 2SB955(K).



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HITACHI

Hitachi, Ltd.

Semiconductor & IC Div.

Nippon Bldg., 2-6-2, 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

Brabens, CA 94005-4835

U.S.A.

Tel 415-589-8300

Fax 415-589-4207

Hitachi Europe GmbH
Electronic Components Group

Continental Europe

Dornacher Straße 3

D-95522 Feldkirchen

München

Tel 089-9 24 80-0

Fax 089-9 29 30 00

Hitachi Europe Ltd.

Electronic Components Div.

Northern Europe Headquarters

Whitbrook Park

Lower Cookham Road

Maidenhead

Berkshire SL6 6YU

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