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semiconductors may lead to personal injury, fire or property damage.
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2SB727(K)

Silicon PNP Epitaxial

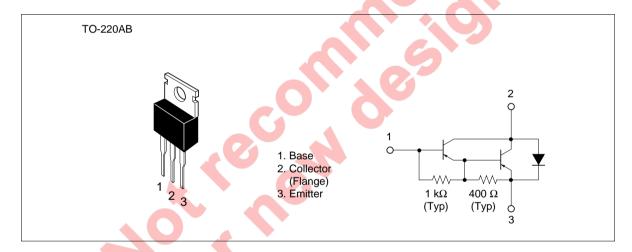


ADE-208-857 (Z) 1st. Edition September 2000

Application

Medium speed and power switching complementary pair with 2SD768(K)

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	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	-6	A
Collector peak current	I _{C(peak)}	-10	А
Collector power dissipation	P _c *1	40	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

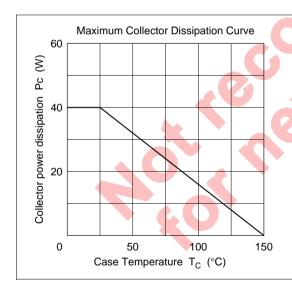
Note: 1. Value at $T_c = 25^{\circ}C$

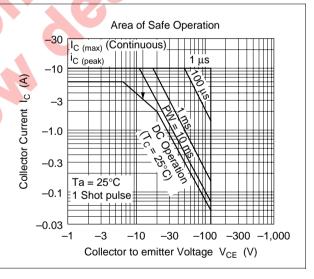
2SB727(K)

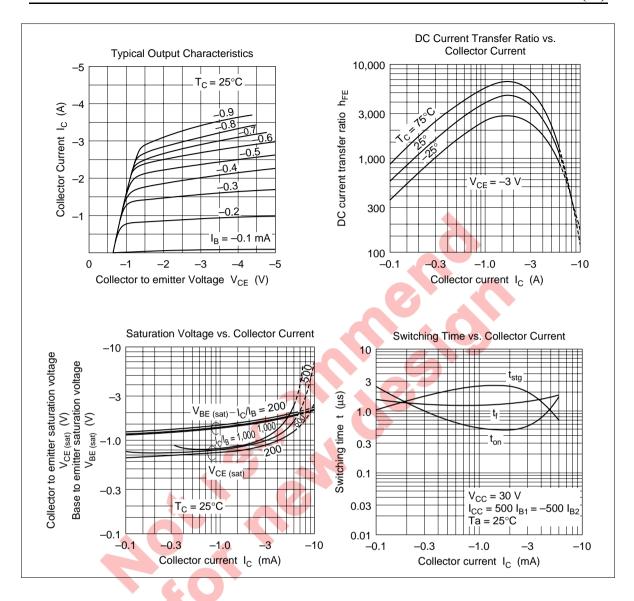
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	_	_	V	I_{c} = -25 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-7	_	_	V	$I_{\rm E} = -50 \text{ mA}, I_{\rm C} = 0$
Collector cutoff current	I _{CBO}	_	_	-100	μΑ	$V_{CB} = -120 \text{ V}, I_{E} = 0$
	I _{CEO}	_	_	-10	μΑ	$V_{CE} = -100 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	h _{FE}	1000	_	20000		$V_{CE} = -3 \text{ V}, I_{C} = -3 \text{ A}^{*1}$
Collector to emitter saturation	$V_{\text{CE(sat)1}}$	_	_	-1.5	V	$I_{\rm C} = -3 \text{ A}, I_{\rm B} = -6 \text{ mA}^{*1}$
voltage	V _{CE(sat)2}	_	_	-3.0	٧	$I_{\rm C} = -6 \text{ A}, I_{\rm B} = -60 \text{ mA}^{*1}$
Base to emitter saturation	$V_{\text{BE}(\text{sat})1}$	_	_	-2.0	V	$I_{\rm C} = -3 \text{ A}, I_{\rm B} = -6 \text{ mA}^{*1}$
voltage	$V_{BE(sat)2}$	_	_	-3.5	V	$I_{\rm C} = -6 \text{ A}, I_{\rm B} = -60 \text{ mA}^{*1}$
Turn on time	t _{on}	_	1.0		μs	$I_C = -3 \text{ A}, I_{B1} = -I_{B2} = -6 \text{ mA}$
Turn off time	t _{off}		3.0		μs	

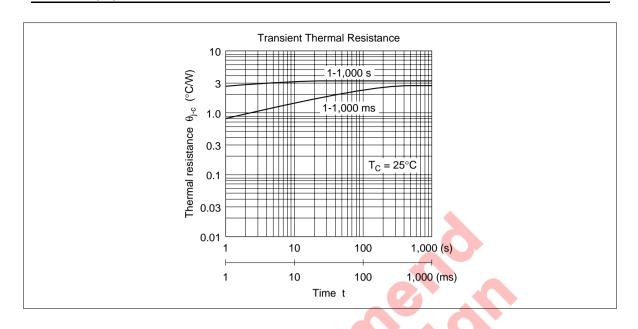
Note: 1. Pulse test







2SB727(K)



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HITACHI

Hitachi, Ltd.

Semiconductor & IC Div. Nippon Bldg., 2-6-2, Ohte-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. 94005-1835 U S A

Tel: 415-589-8300 Fax: 415-583-4207 Hitachi Europe GmbH Electronic Components Group Continental Europe Dornacher Straße 3 D-85622 Feldkirchen München Tel: 089-9 91 80-0

Fax: 089-9 29 30 00

United Kingdom Tel: 0628-585000 Fax: 0628-778322

Berkshire SI 6 8YA

Hitachi Europe Ltd.
Electronic Components Div.
Northern Europe Headquarters
Whitebrook Park
Lower Cookham Road
Maidenhead
Hitachi Asia Pte. Ltd.
16 Collyer Quay #20-00
Hitachi Tower
Singapore 0104
Tel: 535-2100
Maidenhead
Fax: 535-1533

Hitachi Asia (Hong Kong) Ltd. Unit 706, North Tower, World Finance Centre, Harbour City, Canton Road Tsim Sha Tsui, Kowloon

Hong Kong Tel: 27359218 Fax: 27306071

