

# 2SB955(K)

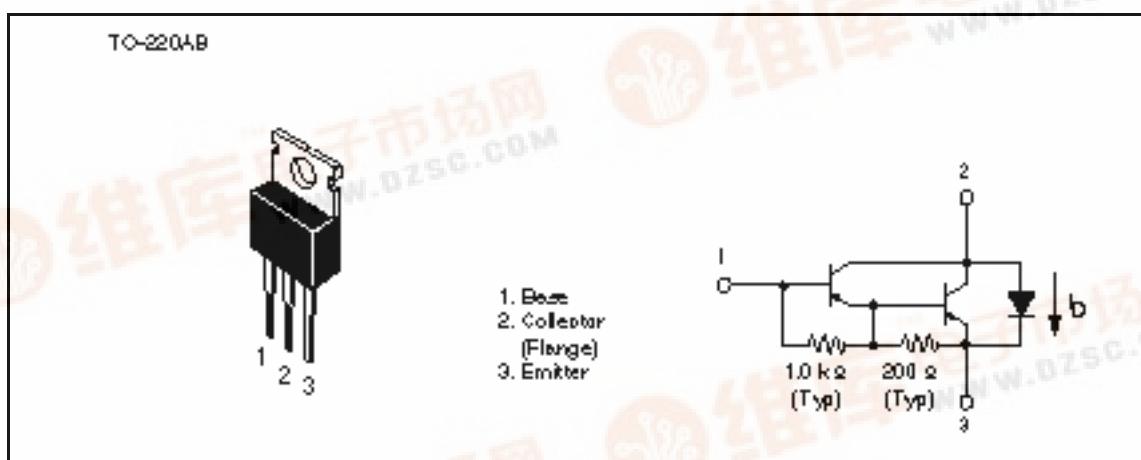
Silicon PNP Triple Diffused

**HITACHI**

## Application

Power switching complementary pair with 2SD1126(K)

## Outline



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### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V <sub>CBO</sub>	-120	V
Collector to emitter voltage	V <sub>CEO</sub>	-120	V
Emitter to base voltage	V <sub>EBO</sub>	-7	V
Collector current	I <sub>C</sub>	-10	A
Collector peak current	I <sub>C(peak)</sub>	-15	A
C to E diode forward current	I <sub>D</sub> <sup>*1</sup>	10	A
Collector power dissipation	P <sub>C</sub> <sup>*2</sup>	50	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Notes: 1. Value at T<sub>C</sub> = 25°C

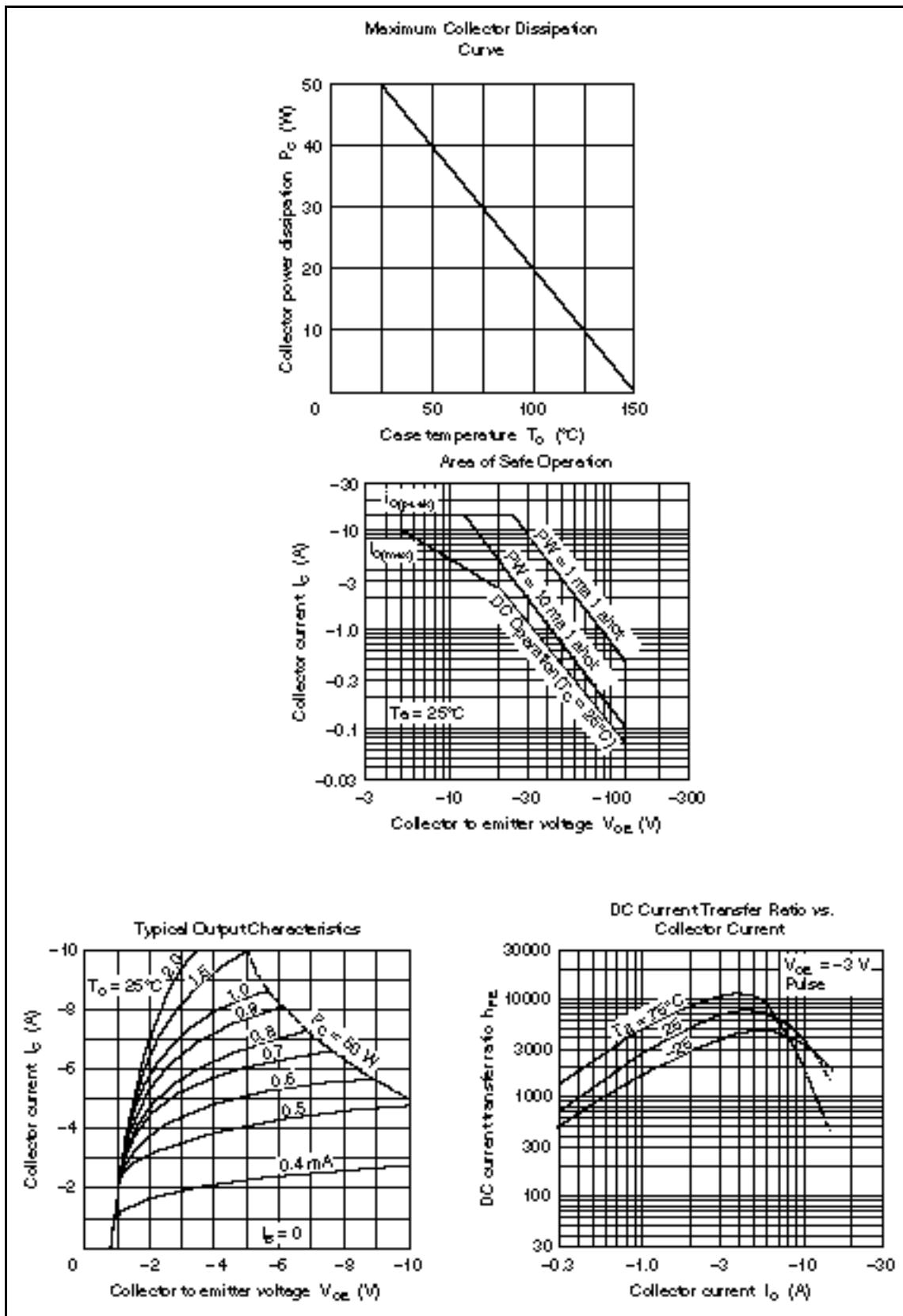
2. PW 1 ms 1 shot

### Electrical Characteristics (Ta = 25°C)

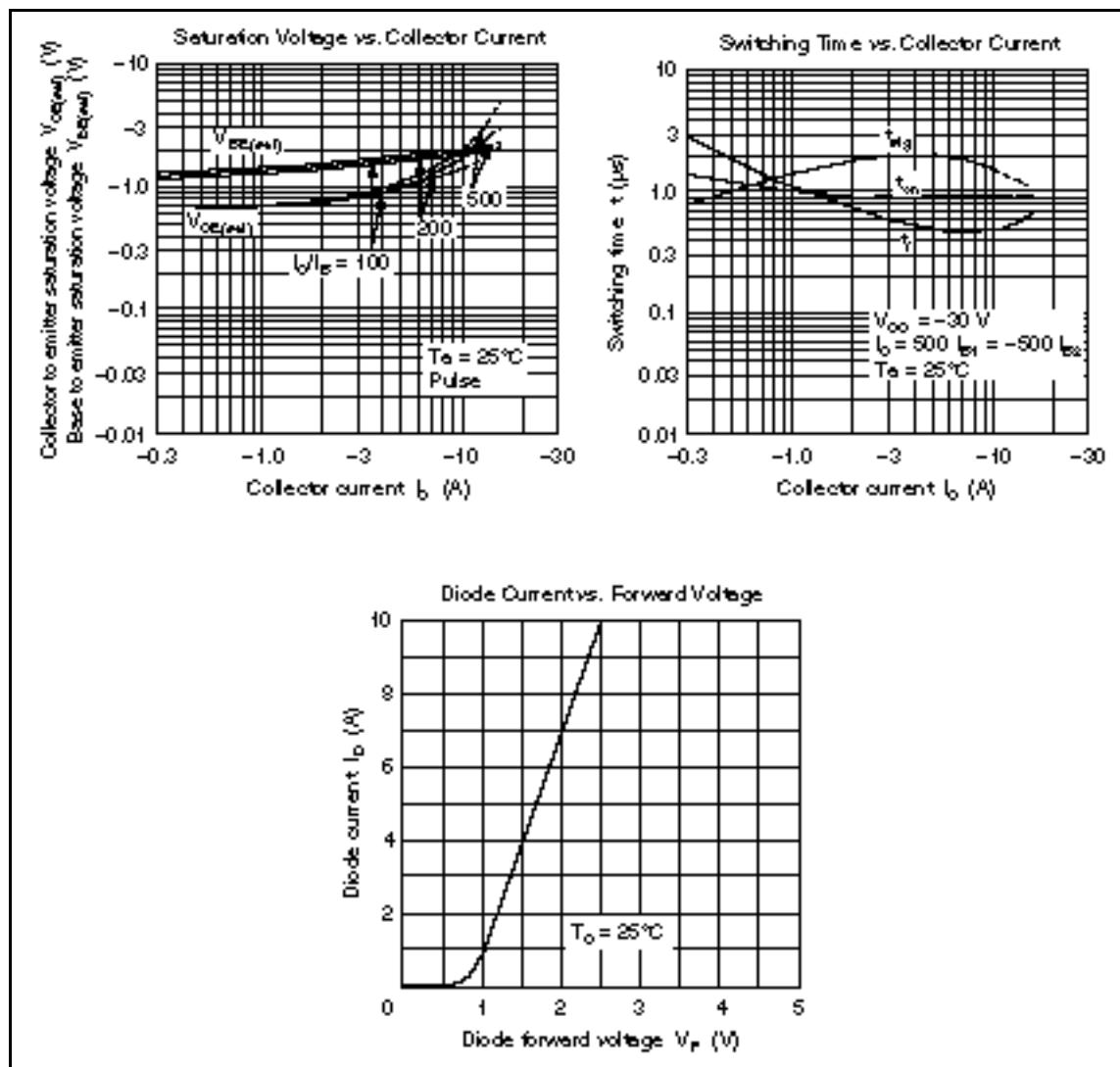
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	V <sub>(BR)CEO</sub>	-120	—	—	V	I <sub>C</sub> = -25 mA, R <sub>BE</sub> =
Emitter to base breakdown voltage	V <sub>(BR)EBO</sub>	-7	—	—	V	I <sub>E</sub> = -200 mA, I <sub>C</sub> = 0
Collector cutoff current	I <sub>CBO</sub>	—	—	-100	μA	V <sub>CB</sub> = -120 V, I <sub>E</sub> = 0
	I <sub>CEO</sub>	—	—	-10	μA	V <sub>CE</sub> = -100 V, R <sub>BE</sub> =
DC current transfer ratio	h <sub>FE</sub>	1000	—	20000		V <sub>CE</sub> = -3 V, I <sub>C</sub> = -5 A <sup>*1</sup>
Collector to emitter saturation voltage	V <sub>CE(sat)1</sub>	—	—	-1.5	V	I <sub>C</sub> = -5 A, I <sub>B</sub> = -10 mA <sup>*1</sup>
	V <sub>CE(sat)2</sub>	—	—	-3.0	V	I <sub>C</sub> = -10 A, I <sub>B</sub> = -0.1 A <sup>*1</sup>
Base to emitter saturation voltage	V <sub>BE(sat)1</sub>	—	—	-2.0	V	I <sub>C</sub> = -5 A, I <sub>B</sub> = -10 mA <sup>*1</sup>
	V <sub>BE(sat)2</sub>	—	—	-3.5	V	I <sub>C</sub> = -10 A, I <sub>B</sub> = -0.1 A <sup>*1</sup>
C to E diode forward voltage	V <sub>D</sub>	—	—	3.0	V	I <sub>D</sub> = 10 A <sup>*1</sup>
Turn on time	t <sub>on</sub>	—	0.8	—	μs	V <sub>CC</sub> = -30 V
Turn off time	t <sub>off</sub>	—	4.0	—	μs	I <sub>C</sub> = -5 A, I <sub>B1</sub> = -I <sub>B2</sub> = -10 mA

Note: 1. Pulse test

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