

2SA2081

Silicon PNP Epitaxial

HITACHI

ADE-208-1477 (Z)

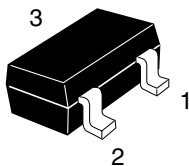
Rev.0
Feb. 2002

Features

- Low frequency amplifier

Outline

CMPAK



- 1. Emitter
- 2. Base
- 3. Collector

Absolute Maximum Ratings

(Ta = 25 °C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	−55	V
Collector to emitter voltage	V_{CEO}	−55	V
Emitter to base voltage	V_{EBO}	−5	V
Collector current	I_C	−100	mA
Collector power dissipation	P_C^*	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

*Value on the glass epoxy board (10 mm x 10 mm x 0.7 mm)

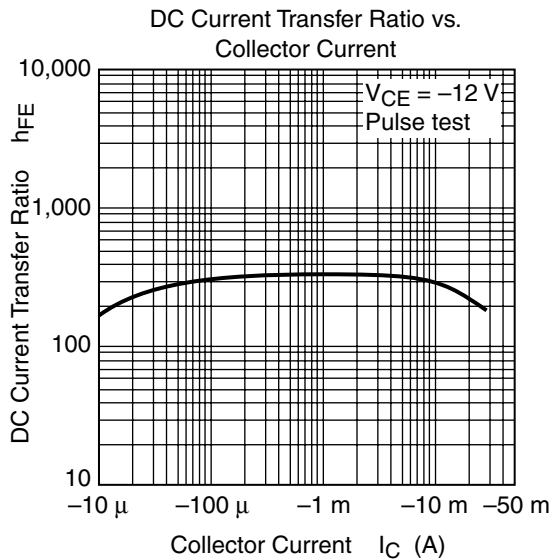
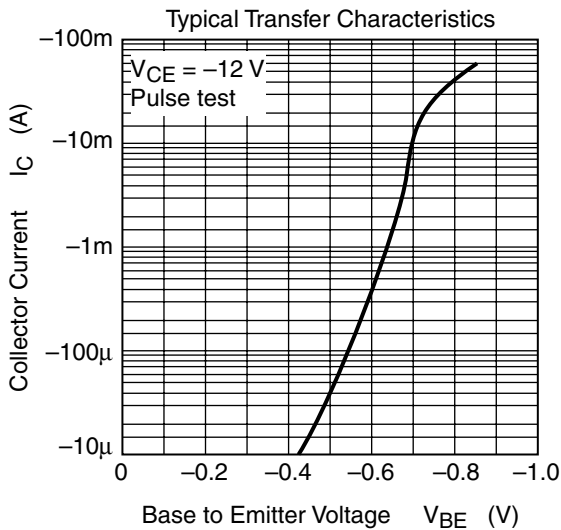
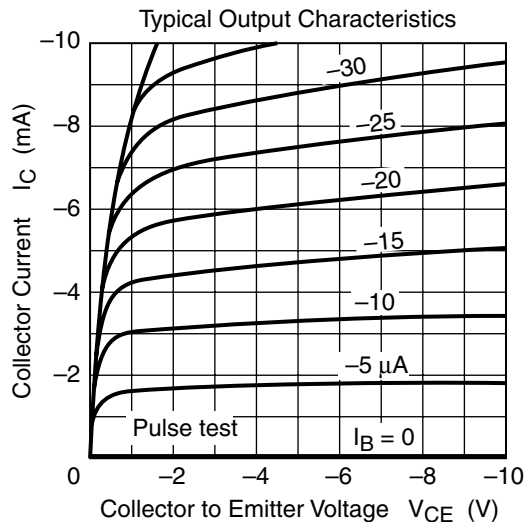
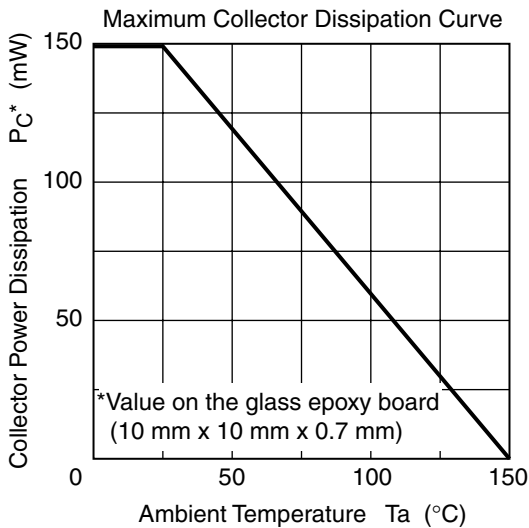
Electrical Characteristics

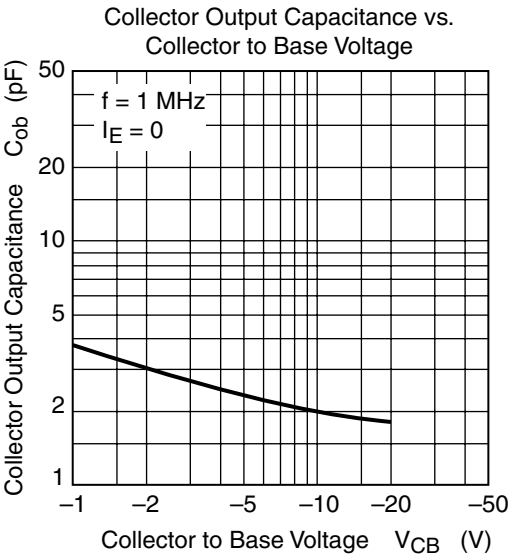
(Ta = 25 °C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	−55	—	—	V	$I_C = -10\ \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	−55	—	—	V	$I_C = -1\ mA, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	−5	—	—	V	$I_E = -10\ \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	−0.5	μA	$V_{CB} = -30\ V, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	−0.5	μA	$V_{EB} = -2\ V, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	160	—	800	—	$V_{CE} = -12\ V, I_C = -2\ mA$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	−0.5	V	$I_C = -10\ mA, I_B = -1\ mA$
Base to emitter voltage	V_{BE}	—	—	−0.75	V	$V_{CE} = -12\ V, I_C = -2\ mA$

Notes: 1. The 2SA2081 is grouped by h_{FE} as follows.

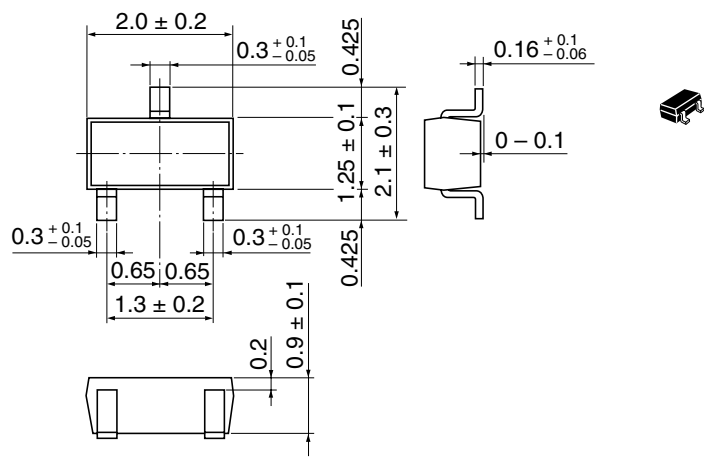
Grade	C	D	E
Mark	CC	CD	CE
h_{FE}	160 to 320	250 to 500	400 to 800





Package Dimensions

As of July, 2001
Unit: mm



Hitachi Code	CMPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.006 g

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