

2SA2083

Silicon PNP Epitaxial

HITACHI

ADE-208-1478 (Z)

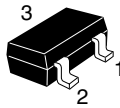
Rev.0
Feb. 2002

Features

- Low frequency amplifier

Outline

SMPAK



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^*	130	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

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

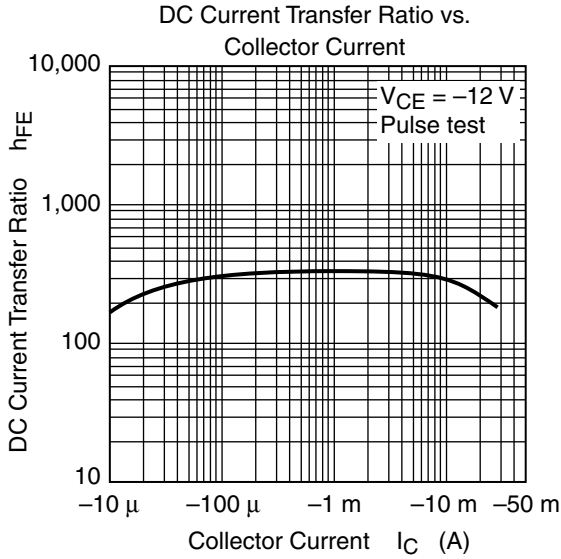
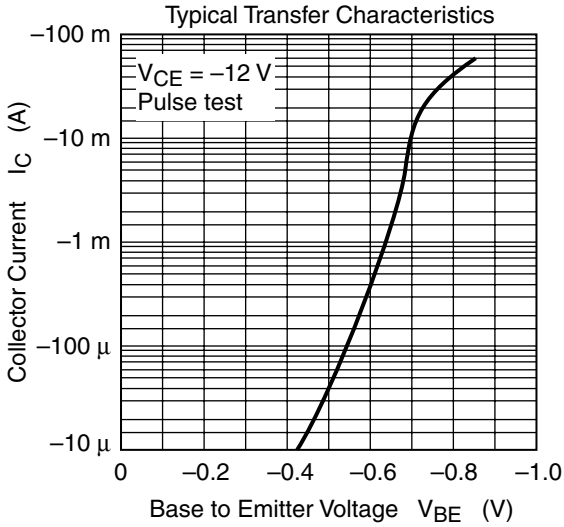
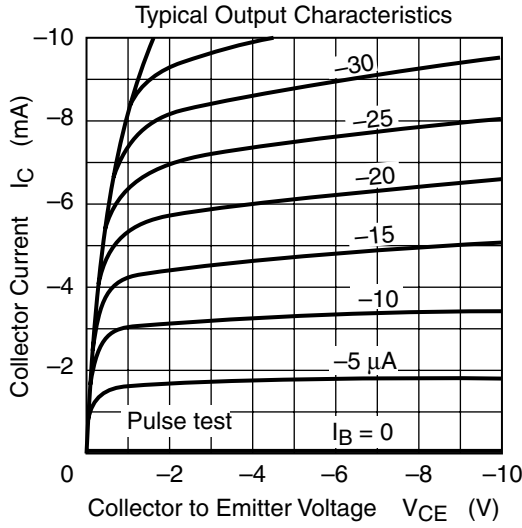
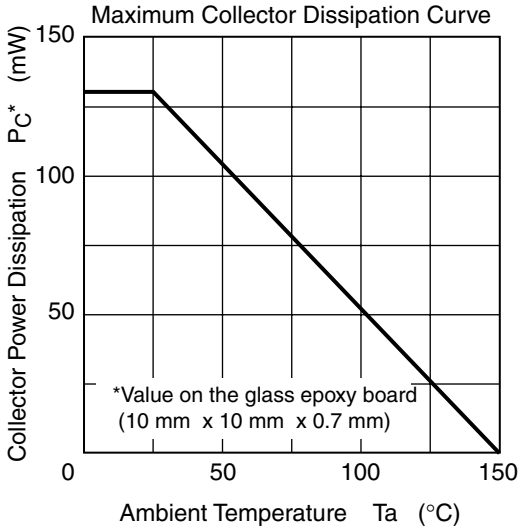
Electrical Characteristics

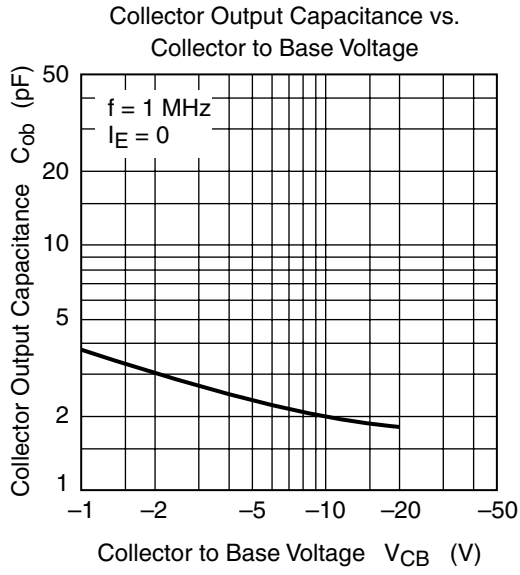
(Ta = 25°C)

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	$I_C = -1 \text{ mA}, R_{BE} = \infty$
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	$V_{CB} = -30 \text{ V}, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-0.5	μA	$V_{EB} = -2 \text{ V}, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	160	—	800	—	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.5	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$
Base to emitter voltage	V_{BE}	—	—	-0.75	V	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$

Notes: 1. The 2SA2083 is grouped by h_{FE} as follows.

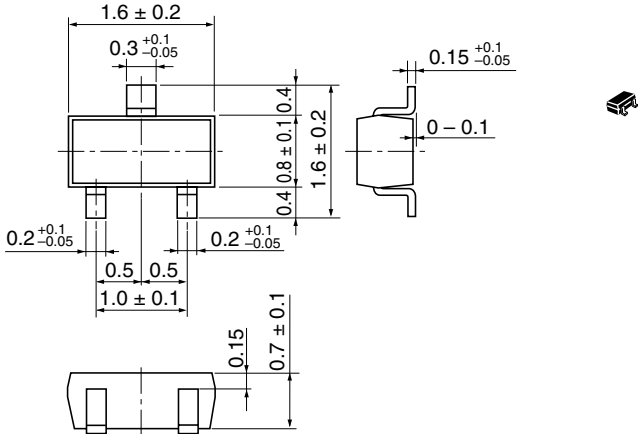
Grade	C	D	E
Mark	CC	CD	CE
h_{FE}	160 to 320	250 to 500	400 to 800





Package Dimensions

As of July, 2001
Unit: mm



Hitachi Code	SMPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.003 g

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