

2SA2080

Silicon PNP Epitaxial

REJ03G0643-0100
(Previous ADE-208-1476)

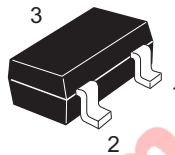
Rev.1.00

Aug.10.2005

Features

Low frequency amplifier

Outline

RENESAS Package code: PTSP0003ZA-A
(Package name: CMPAK[®])

1. Emitter
2. Base
3. Collector

*CMPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	-30	V
Collector to emitter voltage	V _{CEO}	-30	V
Emitter to base voltage	V _{EBO}	-5	V
Collector current	I _C	-100	mA
Emitter current	I _E	100	mA
Collector power dissipation	P _C *	150	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 to +125	°C

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

Electrical Characteristics

(T_a = 25°C)

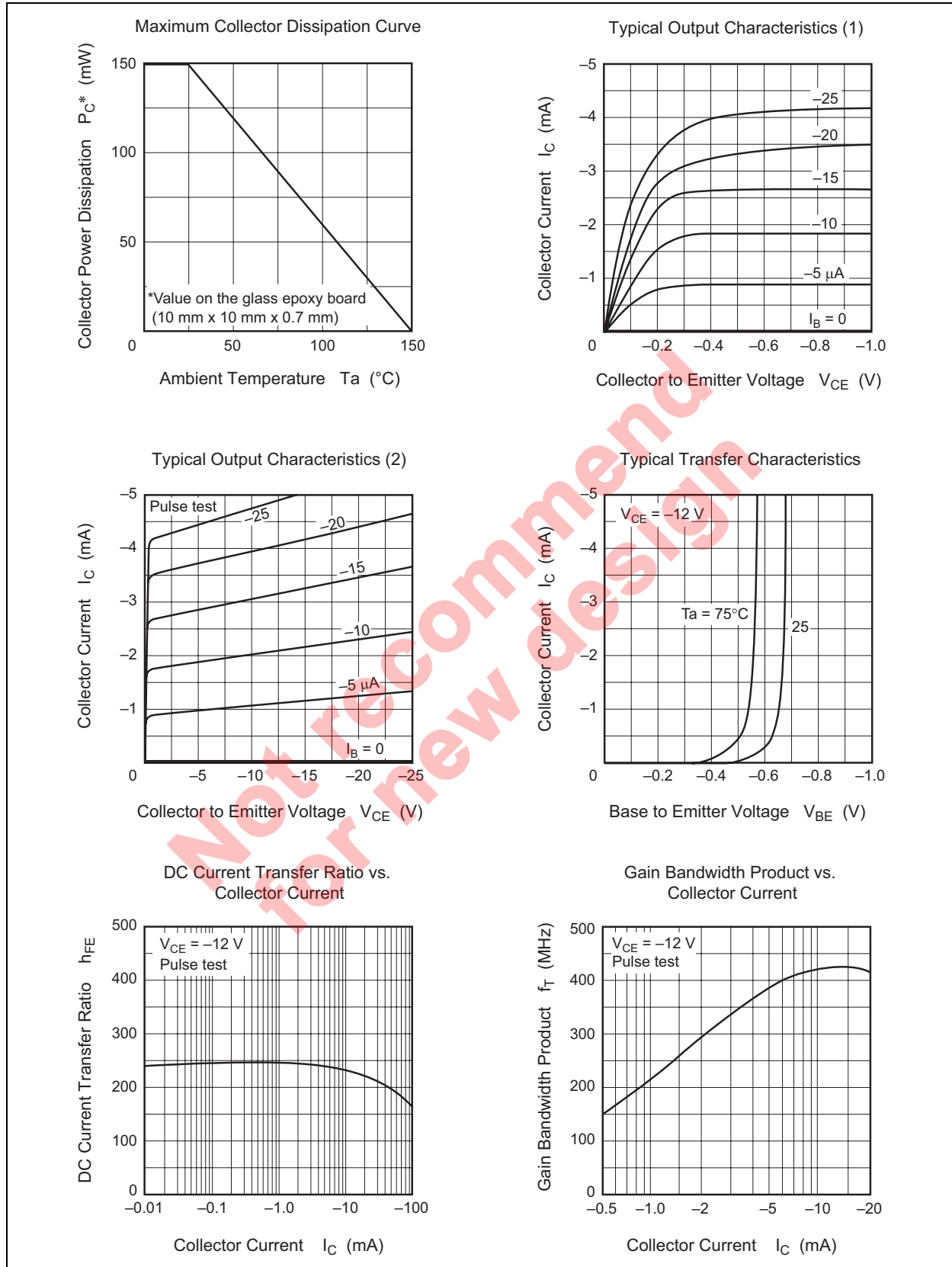
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-30	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-30	—	—	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-0.5	μA	$V_{CB} = -20 \text{ V}, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-0.5	μA	$V_{EB} = -2 \text{ V}, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	160	—	500	—	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.2	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$
Base to emitter voltage	V_{BE}	—	—	-0.75	V	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$

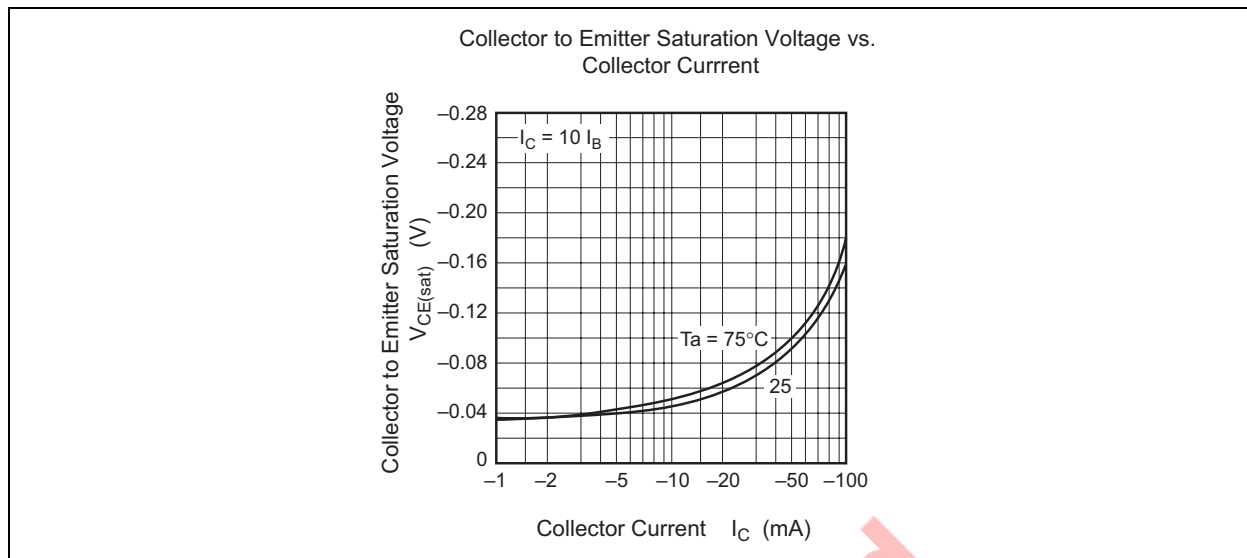
Notes: 1. The 2SA2080 is grouped by h_{FE} as follows.

Grade	C	D
Mark	MC	MD
h_{FE}	160 to 320	250 to 500

Not recommend
for new design

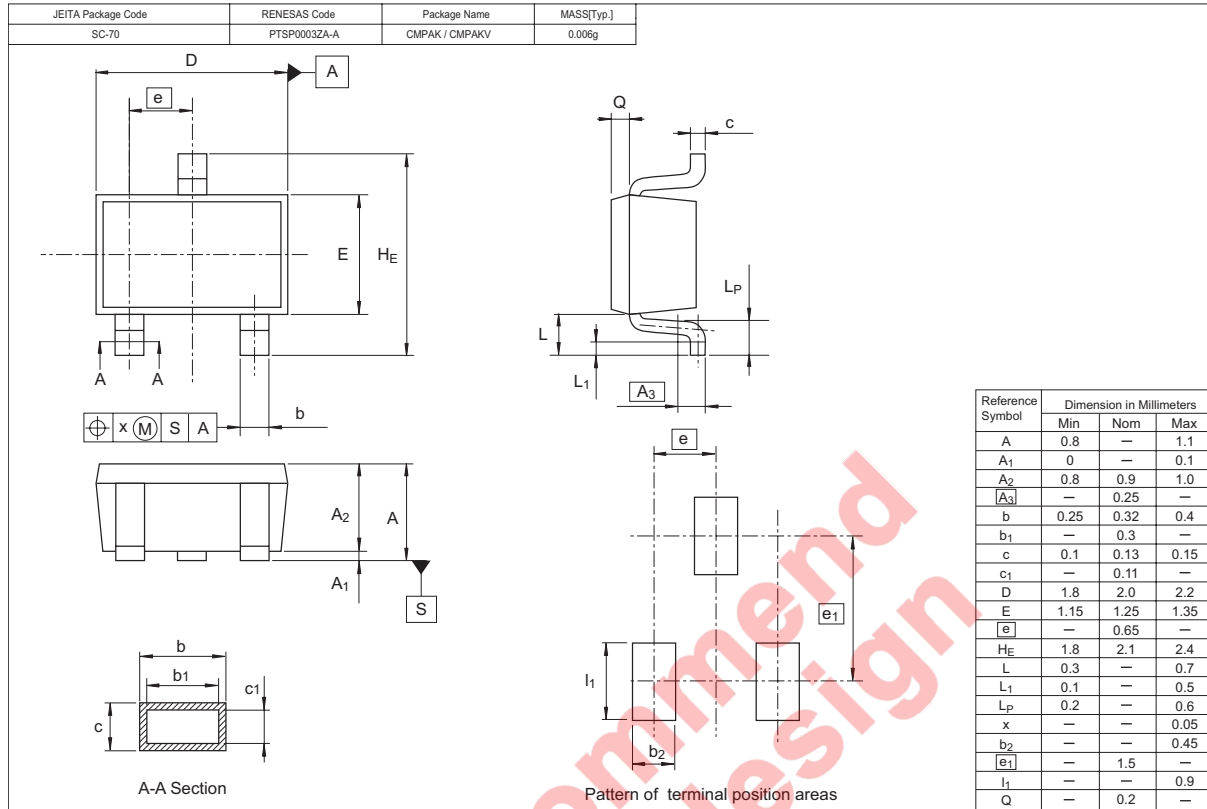
Main Characteristics





Not recommend
for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SA2080MCTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SA2080MDTL-E		

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

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