

2SA1052

Silicon PNP Epitaxial

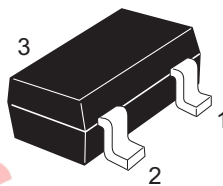
REJ03G0634-0300
(Previous ADE-208-1006A)
Rev.3.00
Aug.10.2005

Application

Low frequency amplifier

Outline

RENESAS Package code: PLSP0003ZB-A
(Package name: MPAK)



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

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 +150	°C

Electrical Characteristics

(Ta = 25°C)

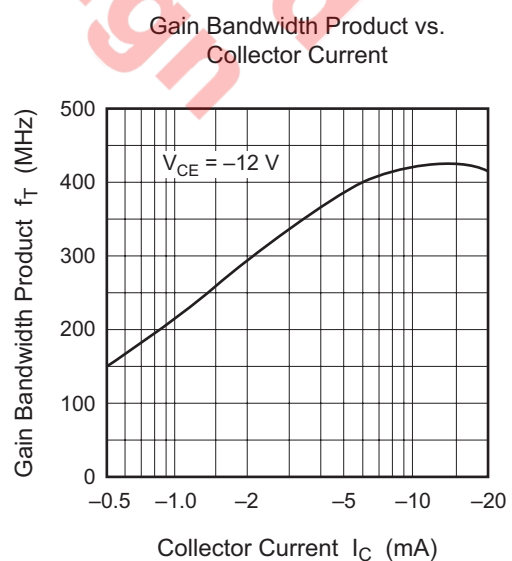
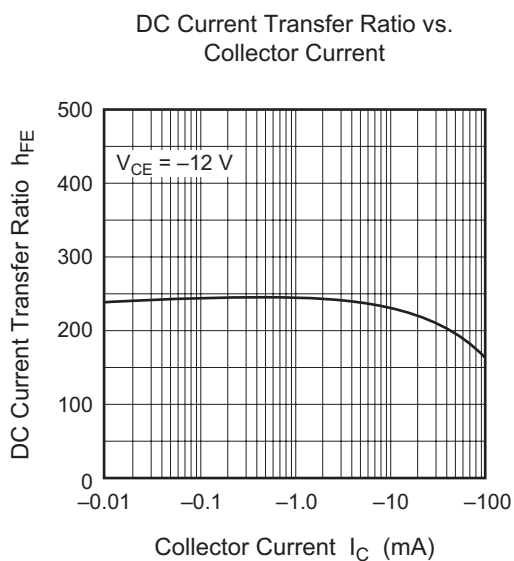
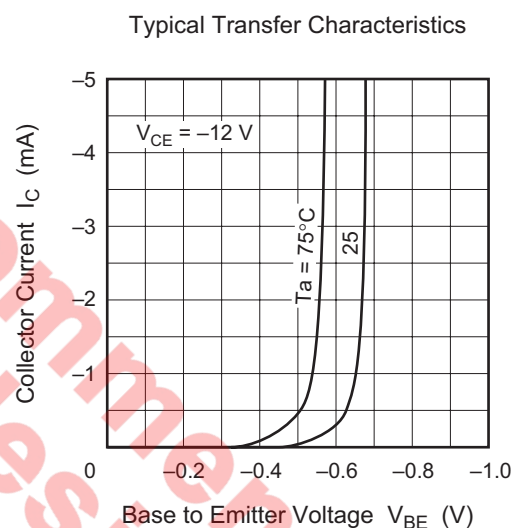
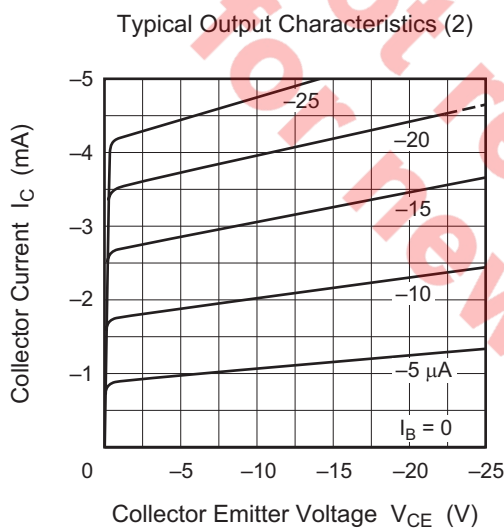
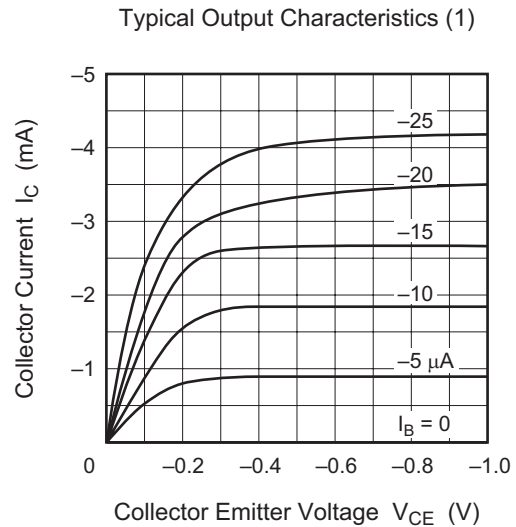
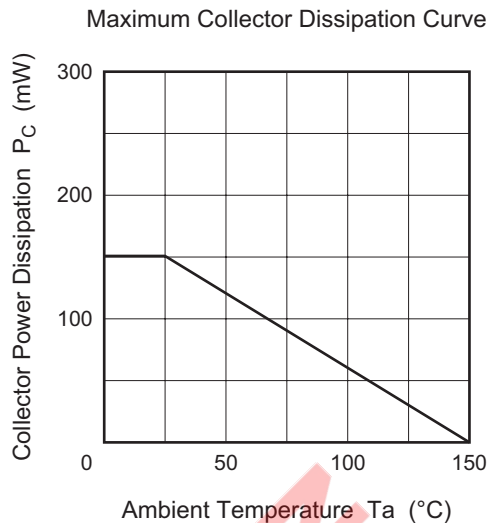
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-30	—	—	V	$I_C = -10\ \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-30	—	—	V	$I_C = -1\ mA, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10\ \mu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

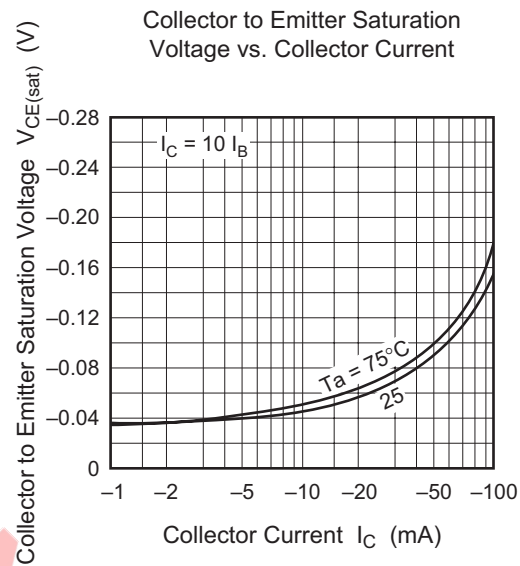
Note: 1. The 2SA1052 is grouped by h_{FE} as follows.

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

Not recommend
for new design

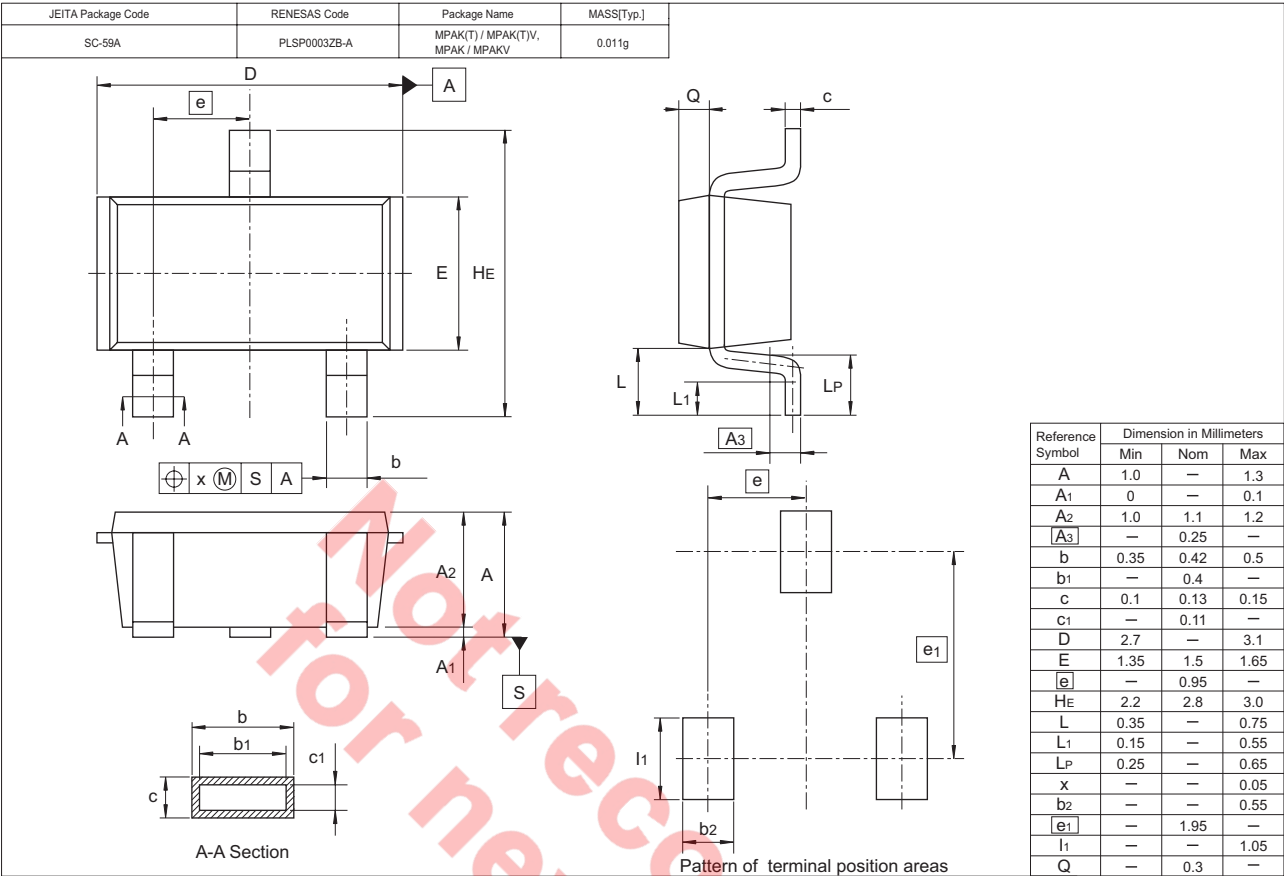
Main Characteristics





Not recommend
for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SA1052MCTR-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SA1052MDTR-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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