

# 2SD1101

Silicon NPN Epitaxial

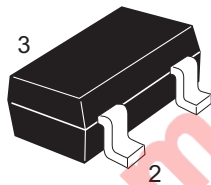
REJ03G0775-0200  
(Previous ADE-208-1142)  
Rev.2.00  
Aug.10.2005

## Application

- Low frequency amplifier
- Complementary pair with 2SB831

## Outline

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



1. Emitter
2. Base
3. Collector

Note: Marking is "AC".

## Absolute Maximum Ratings

( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	25	V
Collector to emitter voltage	$V_{CEO}$	20	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	0.7	A
Collector peak current	$i_{C(\text{peak})}$	1	A
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

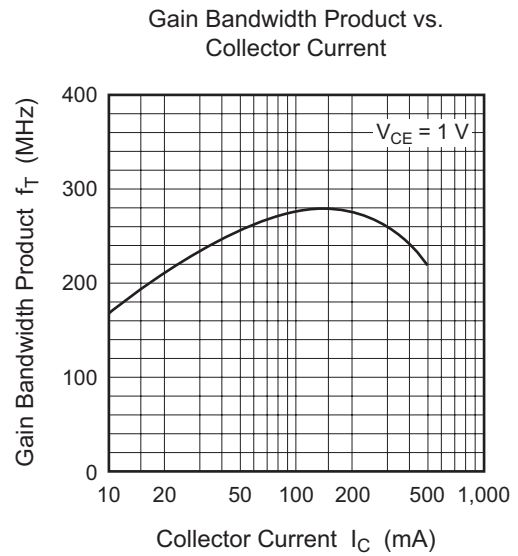
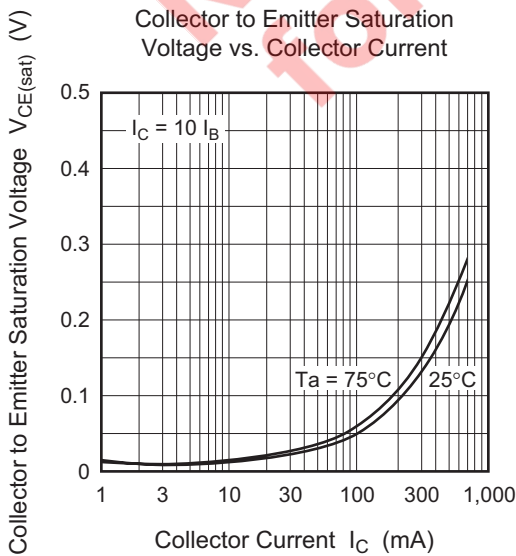
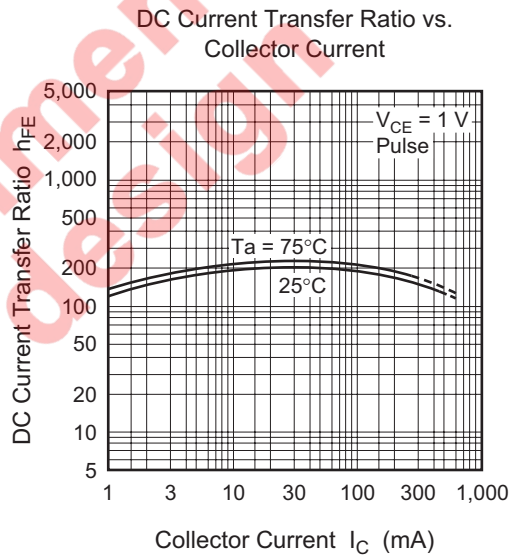
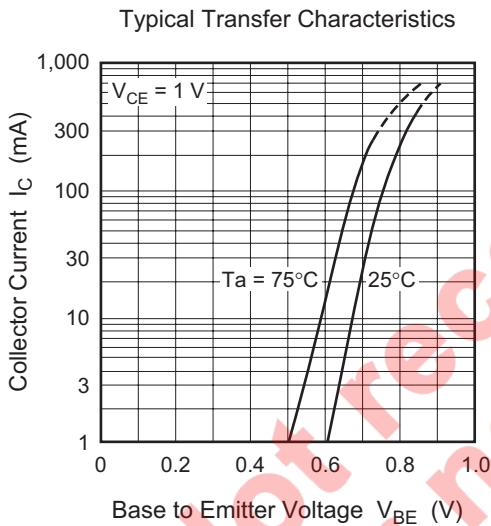
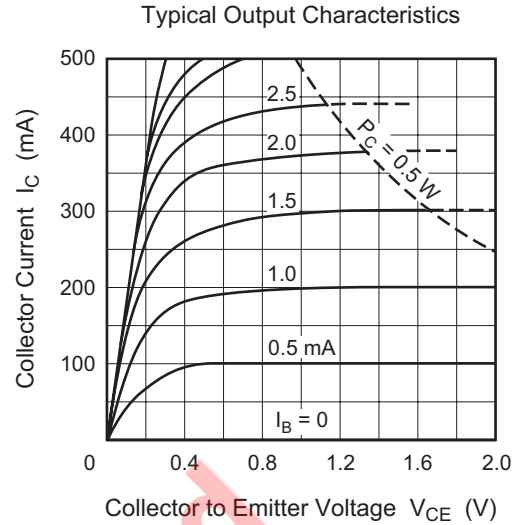
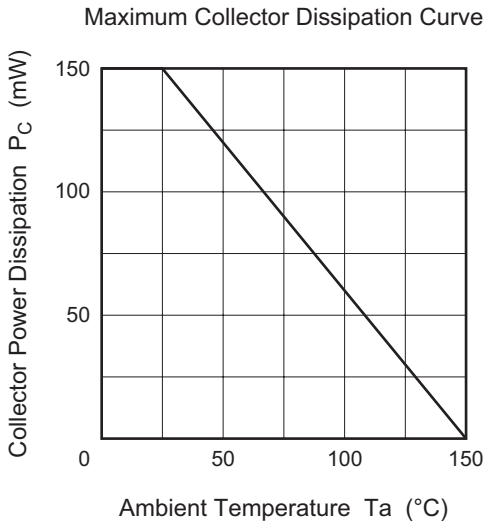
## Electrical Characteristics

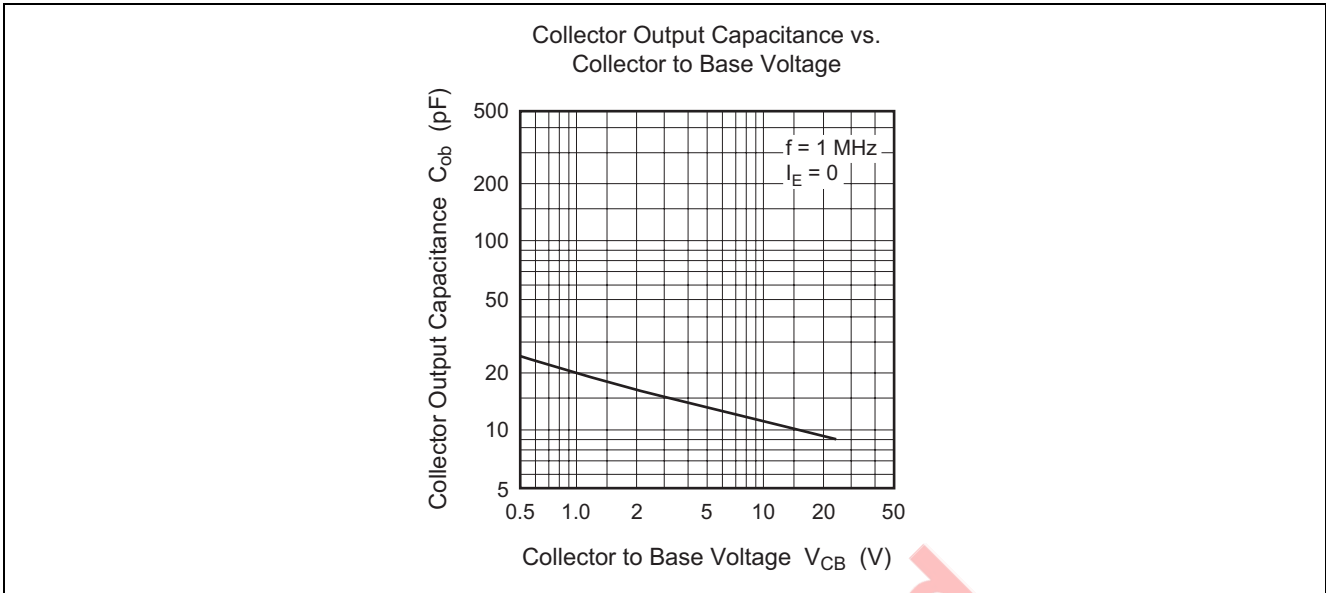
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	25	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	20	—	—	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	$I_{CBO}$	—	—	1.0	$\mu A$	$V_{CB} = 20 \text{ V}, I_E = 0$
DC current transfer ratio	$h_{FE}$	120	—	240		$V_{CE} = 1 \text{ V}, I_C = 0.15 \text{ A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.5	V	$I_C = 0.5 \text{ A}, I_B = 0.05 \text{ A}$
Base to emitter voltage	$V_{BE}$	—	—	1.0	V	$V_{CE} = 1 \text{ V}, I_C = 0.15 \text{ A}$

Not recommend  
for new design

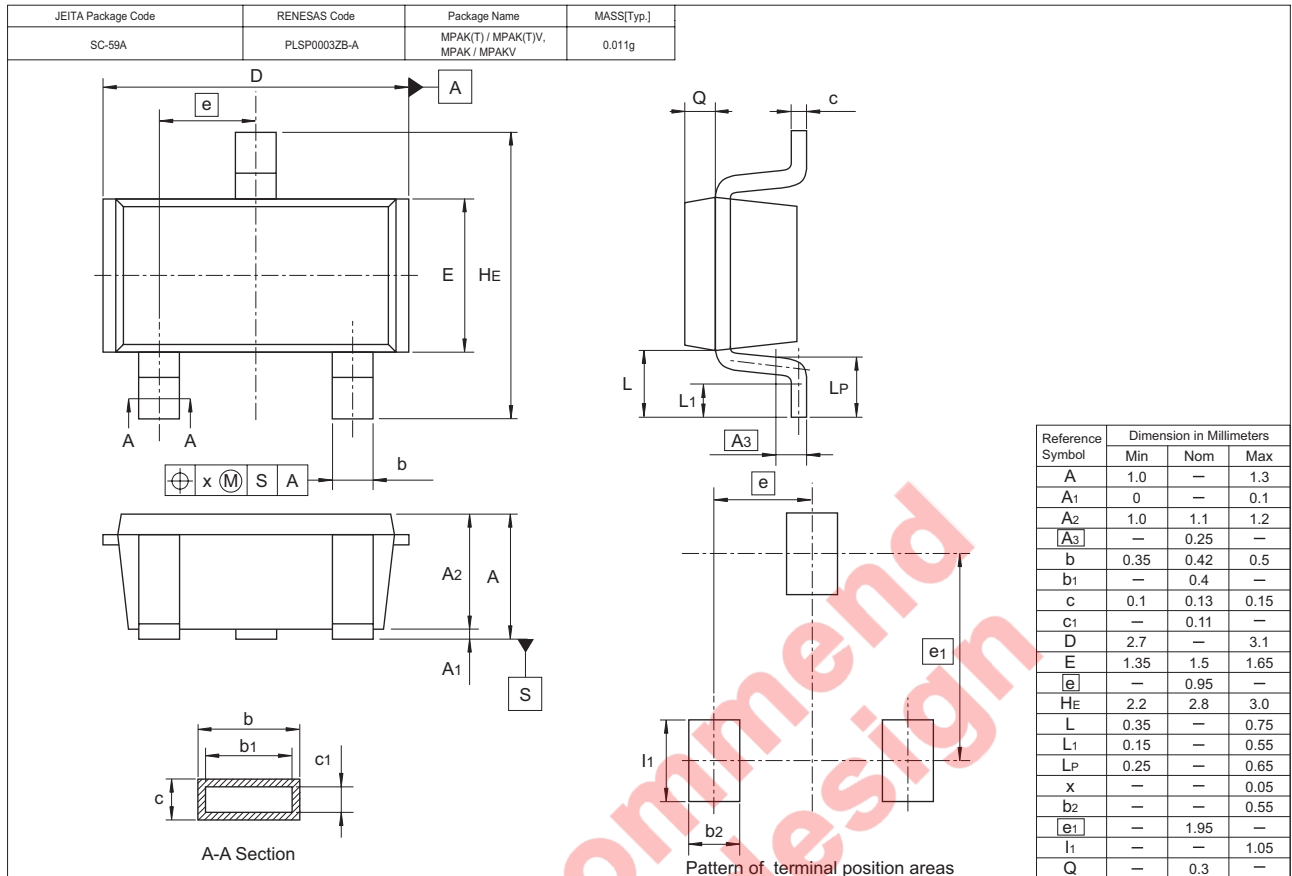
Main Characteristics





Not recommended for new design

### Package Dimensions



### Ordering Information

Part Name	Quantity	Shipping Container
2SD1101ACTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping

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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