

# 2SD1101

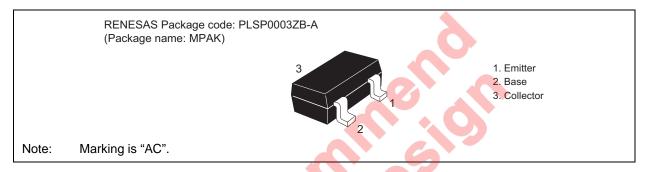
## Silicon NPN Epitaxial

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

## **Application**

- Low frequency amplifier
- Complementary pair with 2SB831

#### **Outline**



## **Absolute Maximum Ratings**

 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	25	V
Collector to emitter voltage	V <sub>CEO</sub>	20	V
Emitter to base voltage	V <sub>EBO</sub>	5	V
Collector current	l <sub>C</sub>	0.7	А
Collector peak current	i <sub>C(peak)</sub>	1	Α
Collector power dissipation	P <sub>C</sub>	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

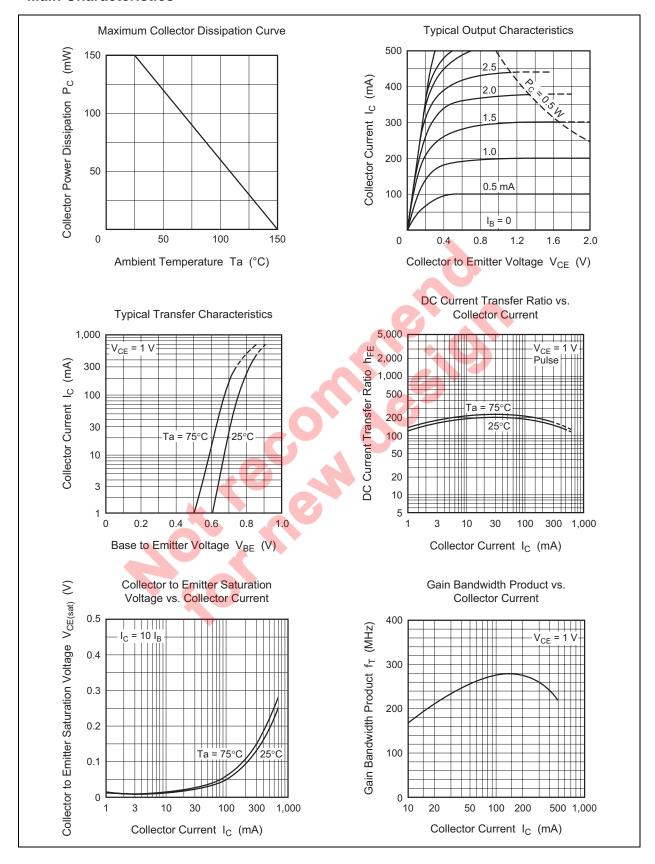
### **Electrical Characteristics**

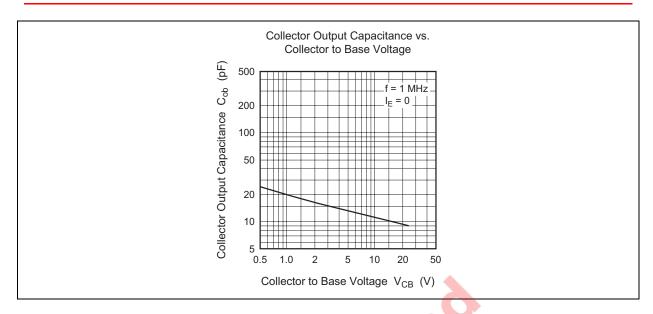
 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	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	$I_E = 10 \mu\text{A},  I_C = 0$
Collector cutoff current	I <sub>CBO</sub>	_	_	1.0	μΑ	$V_{CB} = 20 \text{ V}, I_E = 0$
DC current transfer ratio	h <sub>FE</sub>	120	_	240		$V_{CE} = 1 \text{ V}, I_{C} = 0.15 \text{ A}$
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	_	_	0.5	V	I <sub>C</sub> = 0.5 A, I <sub>B</sub> = 0.05 A
Base to emitter voltage	$V_{BE}$	_	_	1.0	V	$V_{CE} = 1 \text{ V}, I_{C} = 0.15 \text{ A}$

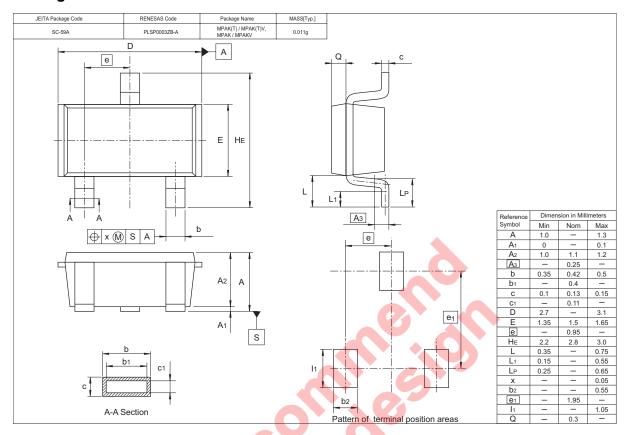


#### **Main Characteristics**





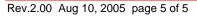
## **Package Dimensions**



## **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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