Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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2SB831

Silicon PNP Epitaxial

REJ03G0653-0200 (Previous ADE-208-1033) Rev.2.00 Aug.10.2005

Application

- Low frequency amplifier
- Complementary pair with 2SD1101

Outline

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

1. Emitter
2. Base
3. Collector

Absolute Maximum Ratings

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

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	Ic	-0.7	А
Collector peak current	i _{C(peak)}	-1	А
Collector power dissipation	P _C	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Electrical Characteristics

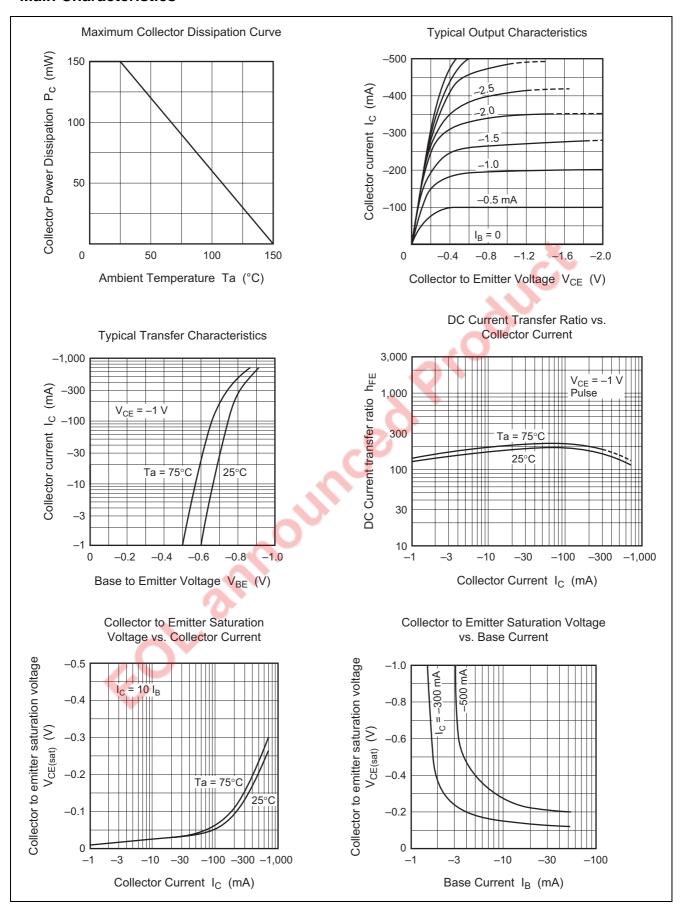
 $(Ta = 25^{\circ}C)$

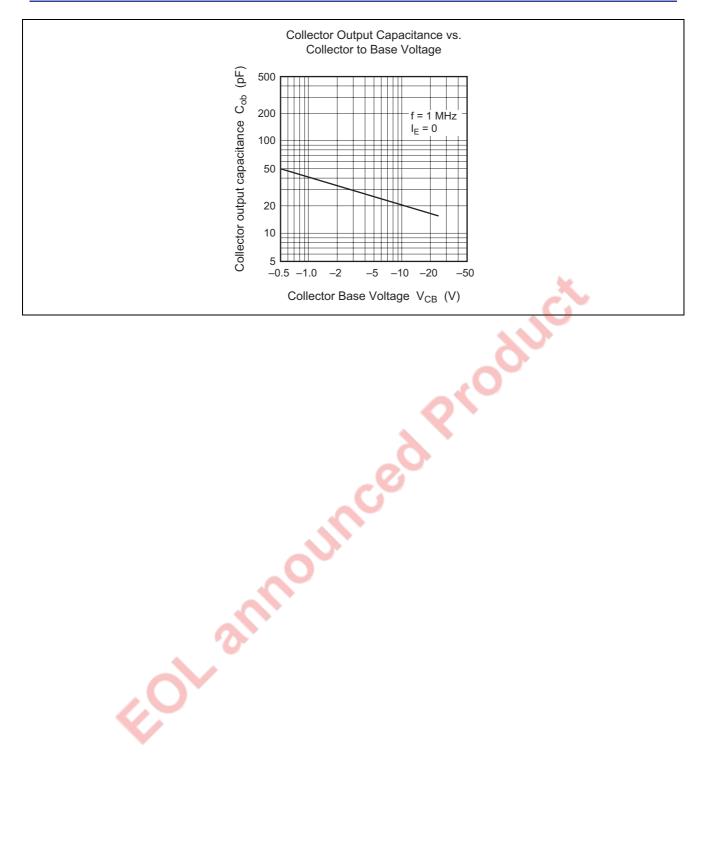
Item		Symbol	Min	Тур	Max	Unit	Test conditions	
Collector to base breakdown voltage		V _{(BR)CBO}	-25	Тур	- Wax	V	$I_C = -10 \mu\text{A}, I_E = 0$	
		V _{(BR)CEO}	-20	_		V	$I_C = -10 \mu A$, $I_E = 0$ $I_C = -1 \text{mA}$, $R_{BE} = \infty$	
Collector to emitter breakdown voltage Emitter to base breakdown voltage		V _{(BR)EBO}	- <u>5</u>			V	$I_{E} = -10 \mu\text{A}, I_{C} = 0$	
	Collector cutoff current		I _{CBO}	_5		-1.0	μΑ	$V_{CB} = -20 \text{ V}, I_{E} = 0$
DC current tra			h _{FE} *1	85		240	μΛ	$V_{CE} = -20 \text{ V}, I_C = -0.15 \text{ A}^{*2}$
-	mitter saturatio	n voltage	V _{CE(sat)}			-0.5	V	$I_C = -0.5 \text{ A}, I_B = -0.05 \text{ A}^2$
Base to emitte		ii voitage	V _{BE}		_	-1.0	V	$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}^2$
	ne 2SB831 is g	rouned by h				-1.0	V	VCE = -1 V, IC = -0.13 A
2. Pu								
Grade	В	С						
Mark	BB	ВС						
h _{FE}	85 to 170	120 to 240						*
Mark BB BC hFE 85 to 170 120 to 240						S. C.		

Notes: 1. The 2SB831 is grouped by hFE as follows.

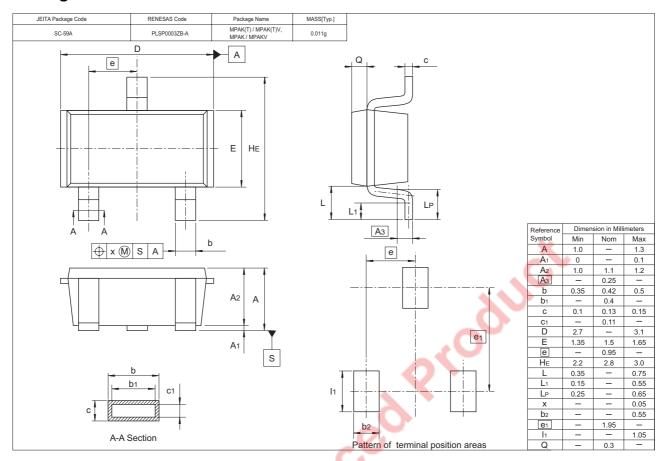
Grade	В	С
Mark	BB	BC
h _{FE}	85 to 170	120 to 240

Main Characteristics





Package Dimensions



Ordering Information

Part Name	Quantity	A.	Shipping Container
2SB831BBTL-E	3000		φ 178 mm Reel, 8 mm Emboss Taping
2SB831BCTL-E			

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Renesas Technology Malaysia Sdn. Bhd.

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: <603> 7955-9390, Fax: <603> 7955-9510

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