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April 1st, 2010 Renesas Electronics Corporation

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

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2SA1122

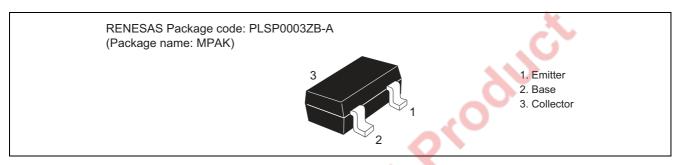
Silicon PNP Epitaxial

REJ03G0637-0200 (Previous ADE-208-1009) Rev.2.00 Aug.10.2005

Application

Low frequency amplifier

Outline



Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	– 55	V
Collector to emitter voltage	$V_{\sf CEO}$	– 55	V
Emitter to base voltage	V_{EBO}	- 5	V
Collector current	Ι _C	-100	mA
Collector power dissipation	P _C	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Electrical Characteristics

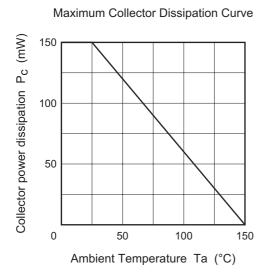
 $(Ta = 25^{\circ}C)$

	Item		Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage		V _{(BR)CBO}	- 55	_	_	V	$I_{C} = -10 \propto A, I_{E} = 0$	
Collector to e	mitter breakdov	wn voltage	V _{(BR)CEO}	- 55		_	V	$I_C = -1$ mA, $R_{BE} = \infty$
Emitter to bas	se breakdown v	oltage/	V _{(BR)EBO}	- 5	_	—	V	I _E = −10 ∞A, I _C = 0
Collector cuto	off current		Ісво	_	_	-0.5	∝A	$V_{CB} = -30 \text{ V}, I_E = 0$
Emitter cutoff	current		I _{EBO}	_	_	-0.5	∝A	$V_{EB} = -2 \text{ V}, I_{C} = 0$
DC current tra	ansfer ratio		h _{FE} *1	160	_	500		$V_{CE} = -12 \text{ V}, I_{C} = -2 \text{ mA}$
Collector to e	mitter saturatio	n voltage	V _{CE(sat)}	_	_	-0.5	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$
Base to emitt	er voltage		V_{BE}	_	_	-0.75	V	$V_{CE} = -12 \text{ V}, I_{C} = -2 \text{ mA}$
Note: 1. T	he 2SA1122 is	grouped by I	h _{FE} as follows	S.	•			
Grade	С	D						
Mark	CC	CD						A-0
h _{FE}	160 to 320	250 to 500						36
			nno	JI				

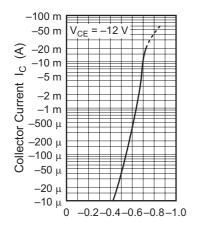
Note: 1. The 2SA1122 is grouped by hFE as follows.

Grade	С	D
Mark	CC	CD
h _{FE}	160 to 320	250 to 500

Main Characteristics

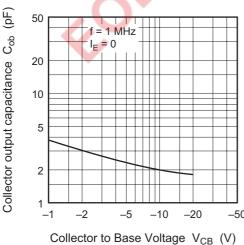


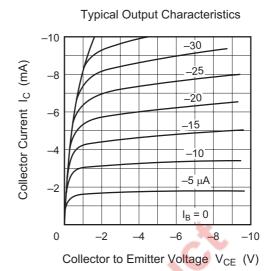




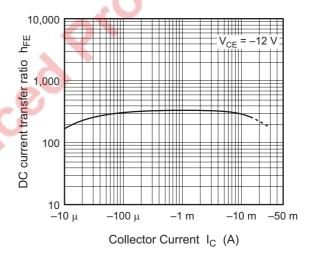
Base to Emitter Voltage V_{BE} (V)

Collector Output Capacitance vs. Collector to Base Voltage

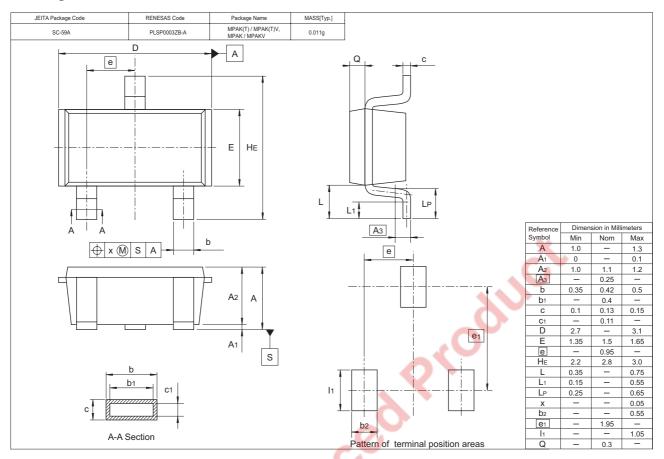




DC Current Transfer Ratio vs.
Collector Current



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SA1122CCTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SA1122CDTL-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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