

# 2SA1566

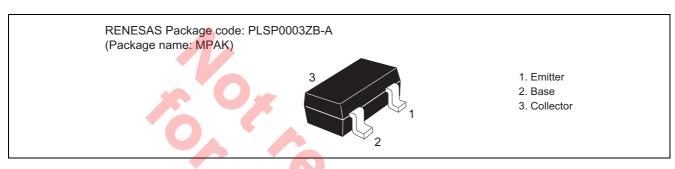
# Silicon PNP Epitaxial

REJ03G0642-0200 (Previous ADE-208-1021) 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 <sub>CBO</sub>	-120	V
Collector to emitter voltage	V <sub>CEO</sub>	-120	V
Emitter to base voltage	V <sub>EBO</sub>	-5	V
Collector current	Ic	-100	mA
Collector power dissipation	Pc	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	$V_{(BR)CBO}$	-120	_	_	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	_	_	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	<b>-</b> 5	_	_	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	I <sub>CBO</sub>	_	_	-0.1	μΑ	$V_{CB} = -70 \text{ V}, I_E = 0$
Emitter cutoff current	I <sub>EBO</sub>	_	_	-0.1	μΑ	$V_{EB} = -2 \text{ V}, I_C = 0$
DC current transfer ratio	h <sub>FE</sub> *1	250	_	800		$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}^{*2}$
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	_	_	-0.15	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA*}^2$
Base to emitter voltage	V <sub>BE(sat)</sub>	_	_	-1.0	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA*}^2$

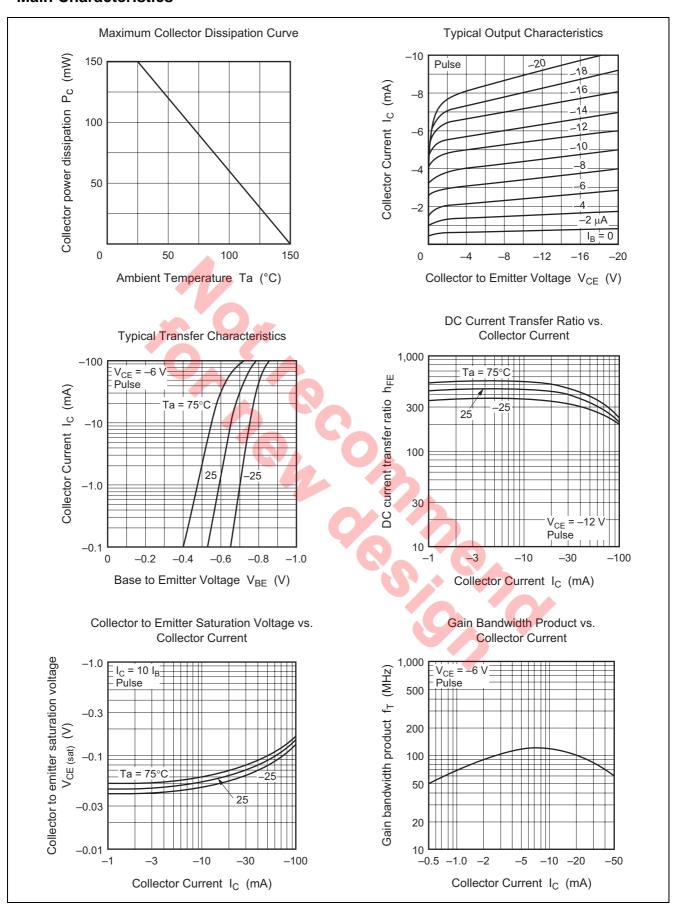
Notes: 1. The 2SA1566 is grouped by hFE as follows.

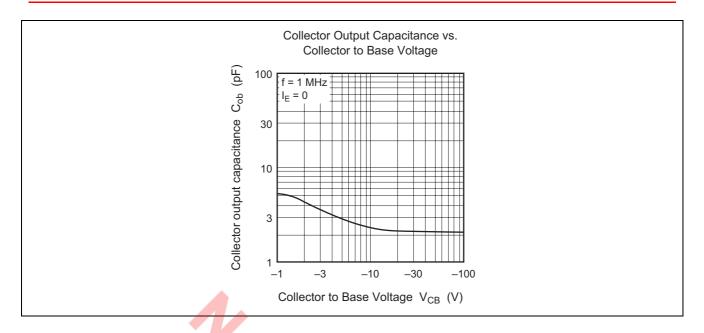
2. Pulse test

Grade	D	E
Mark	JID	JIE
h <sub>FE</sub>	250 to 500	400 to 800



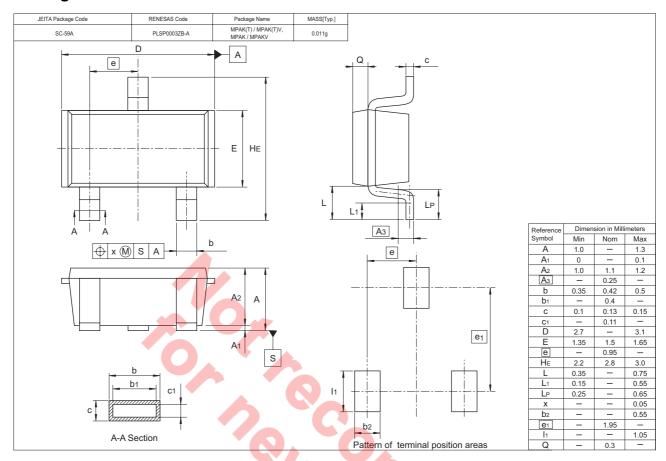
#### **Main Characteristics**







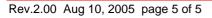
## **Package Dimensions**



## **Ordering Information**

Part Name	Quantity	Shipping Container
2SA1566JIDTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SA1566JIETL-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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