

2SA1566

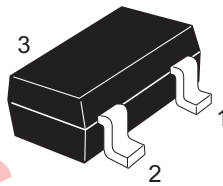
Silicon PNP Epitaxial

REJ03G0642-0200
(Previous ADE-208-1021)
Rev.2.00
Aug.10.2005

Application

Low frequency amplifier

Outline

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

1. Emitter
2. Base
3. Collector

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-120	V
Collector to emitter voltage	V_{CEO}	-120	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	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	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-0.1	μA	$V_{CB} = -70 \text{ V}, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-0.1	μA	$V_{EB} = -2 \text{ V}, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	250	—	800		$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}^{*2}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.15	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}^{*2}$
Base to emitter voltage	$V_{BE(sat)}$	—	—	-1.0	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}^{*2}$

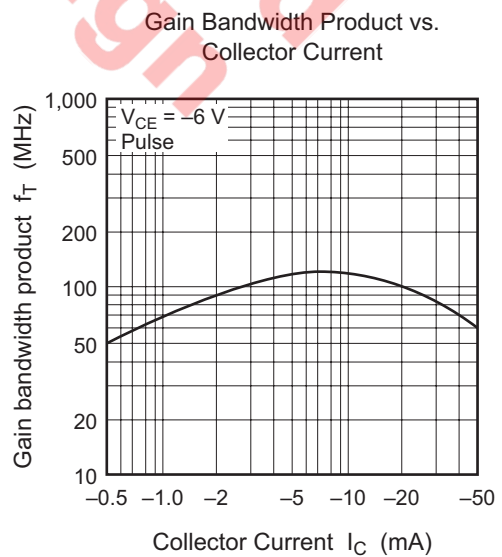
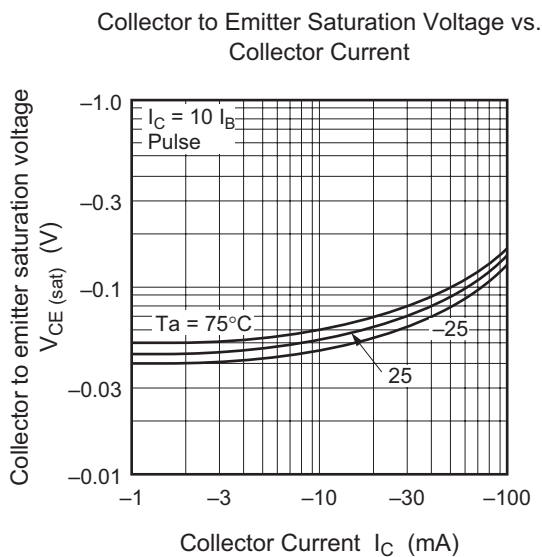
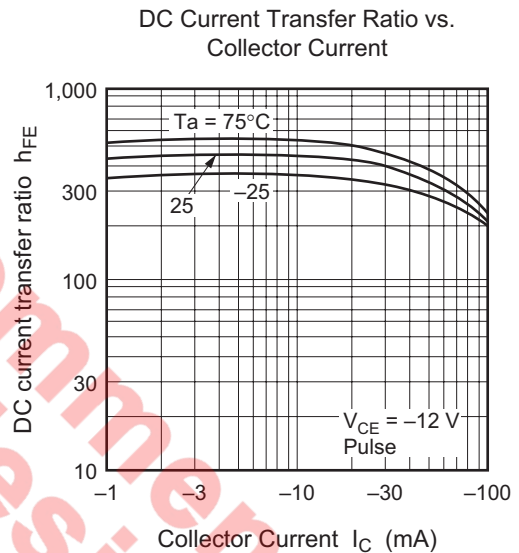
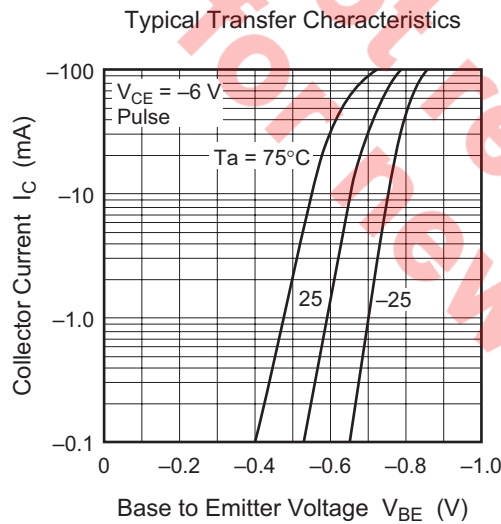
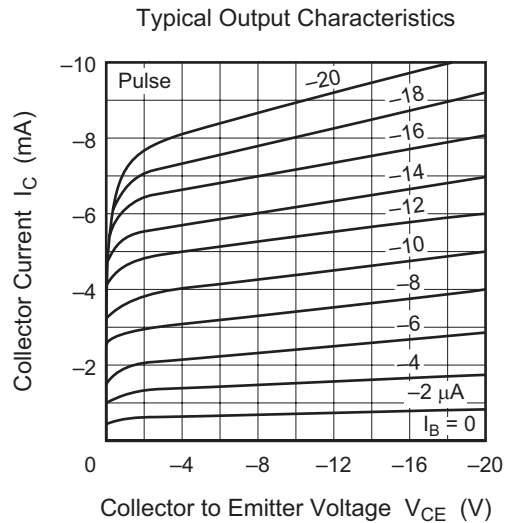
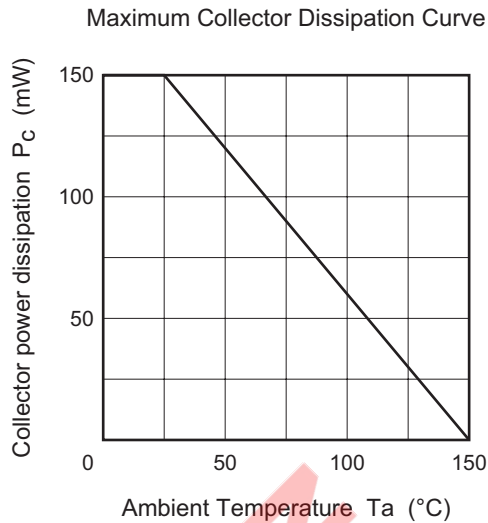
Notes: 1. The 2SA1566 is grouped by h_{FE} as follows.

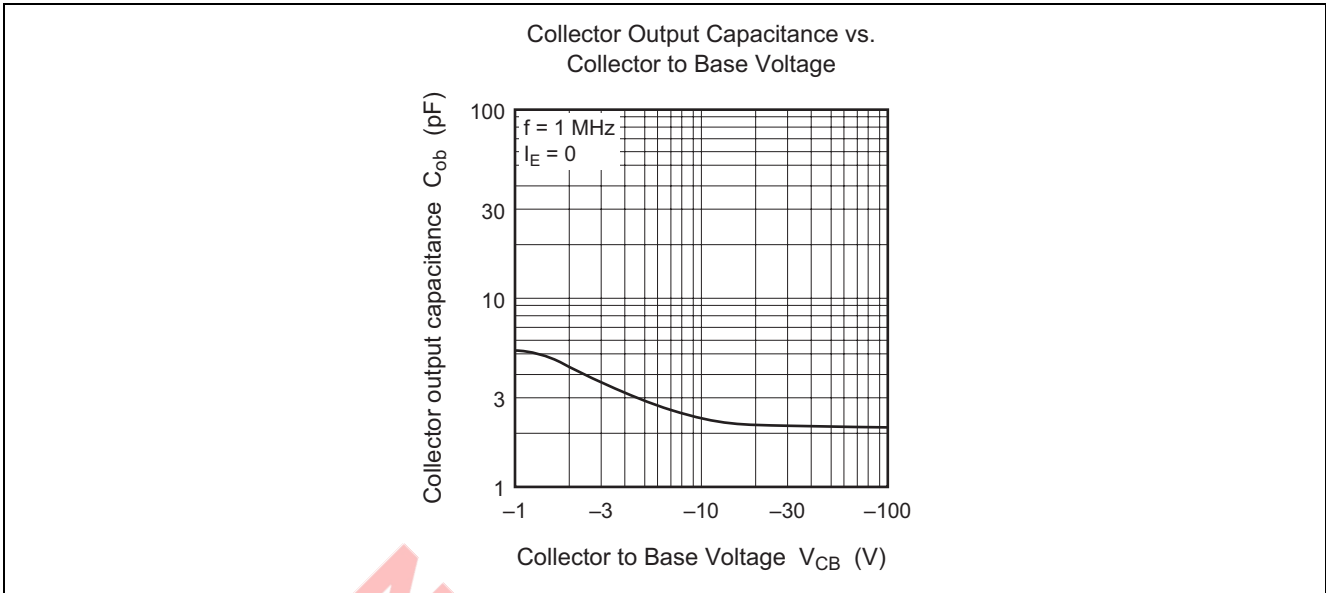
2. Pulse test

Grade	D	E
Mark	JID	JIE
h_{FE}	250 to 500	400 to 800

Not recommend
for new design

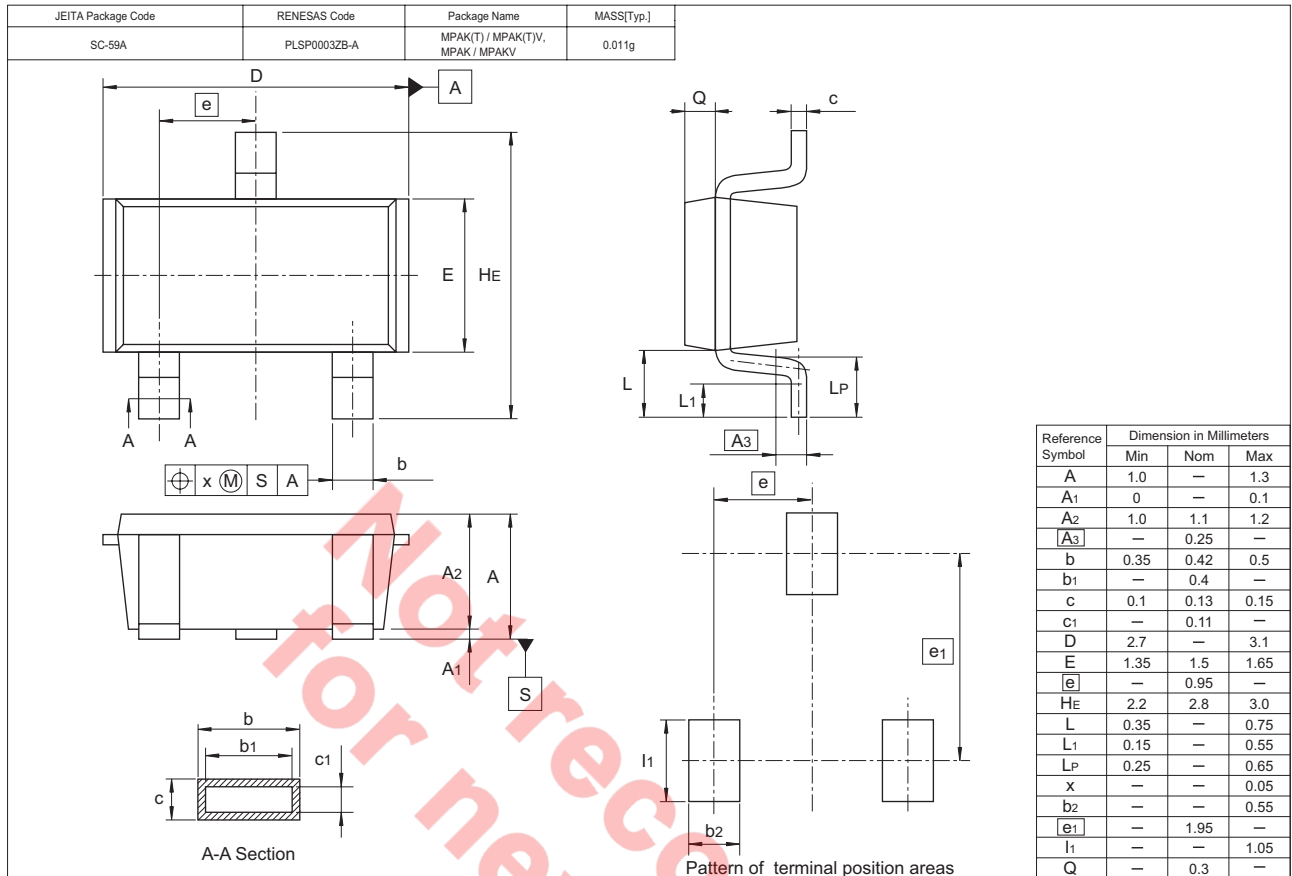
Main Characteristics





Not recommend
for new design

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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Renesas Technology Taiwan Co., Ltd.

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Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
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Renesas Technology Singapore Pte. Ltd.

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Tel: <82> 2-796-3115, Fax: <82> 2-796-2145

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