

To our customers,

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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2SC3380

Silicon NPN Triple Diffused

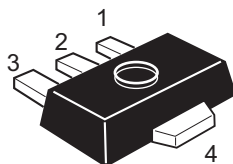
REJ03G0713-0300
 (Previous ADE-208-1082A)
 Rev.3.00
 Aug.10.2005

Application

- High frequency high voltage amplifier
- High voltage switch

Outline

RENESAS Package code: PLZZ0004CA-A
 (Package name: UPAK[®])



1. Base
2. Collector
3. Emitter
4. Collector (Flange)

Note: Marking is "AS".

*UPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C^{*1}	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

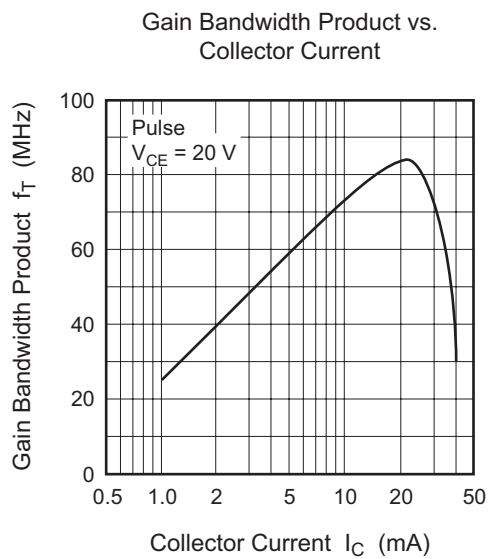
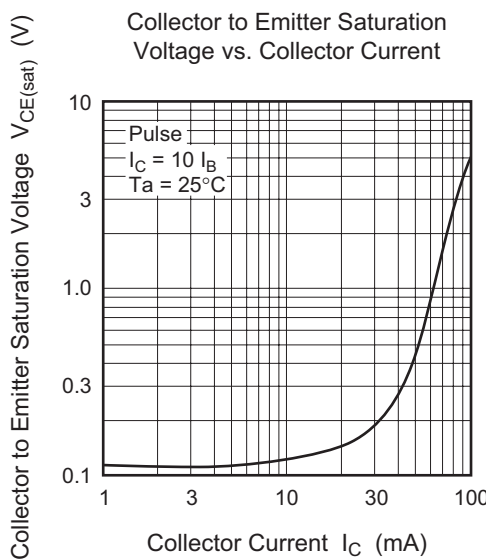
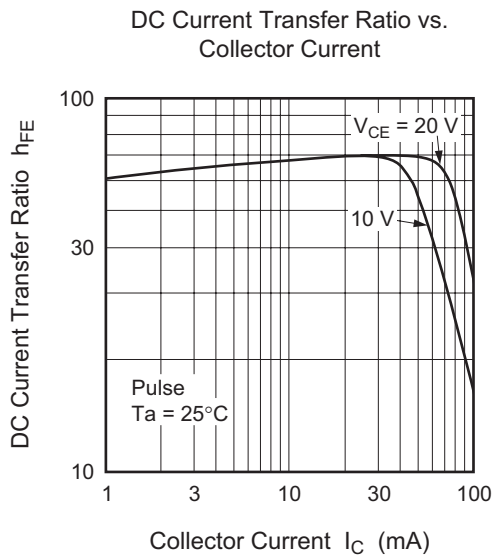
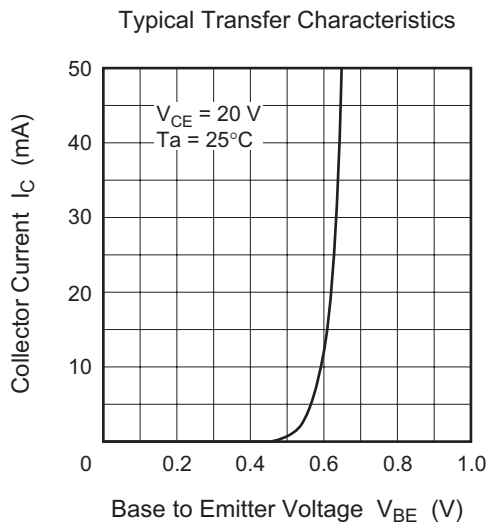
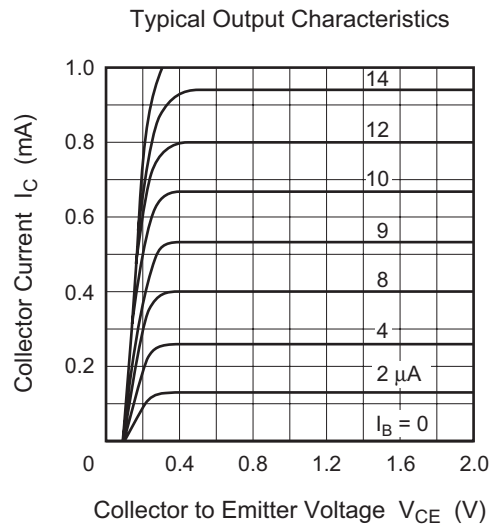
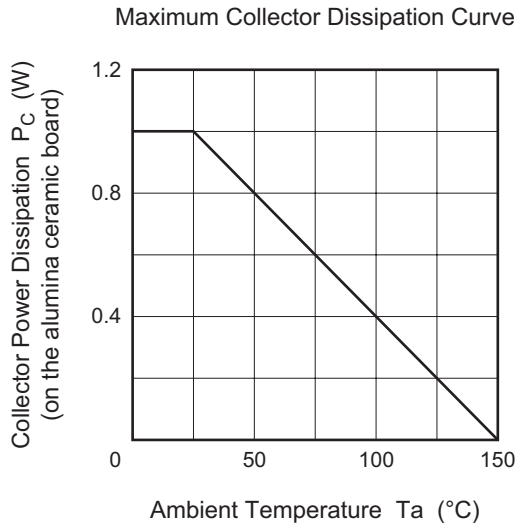
Note: 1. Value on the alumina ceramic board (12.5 × 20 × 0.7 mm)

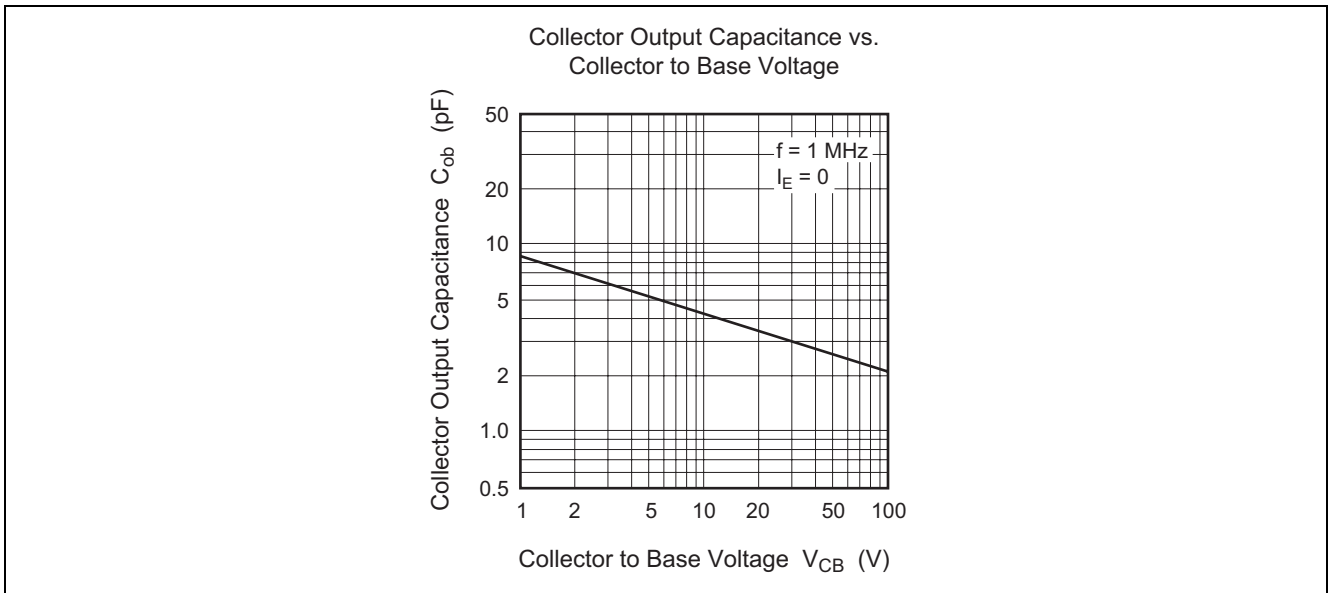
Electrical Characteristics

(Ta = 25°C)

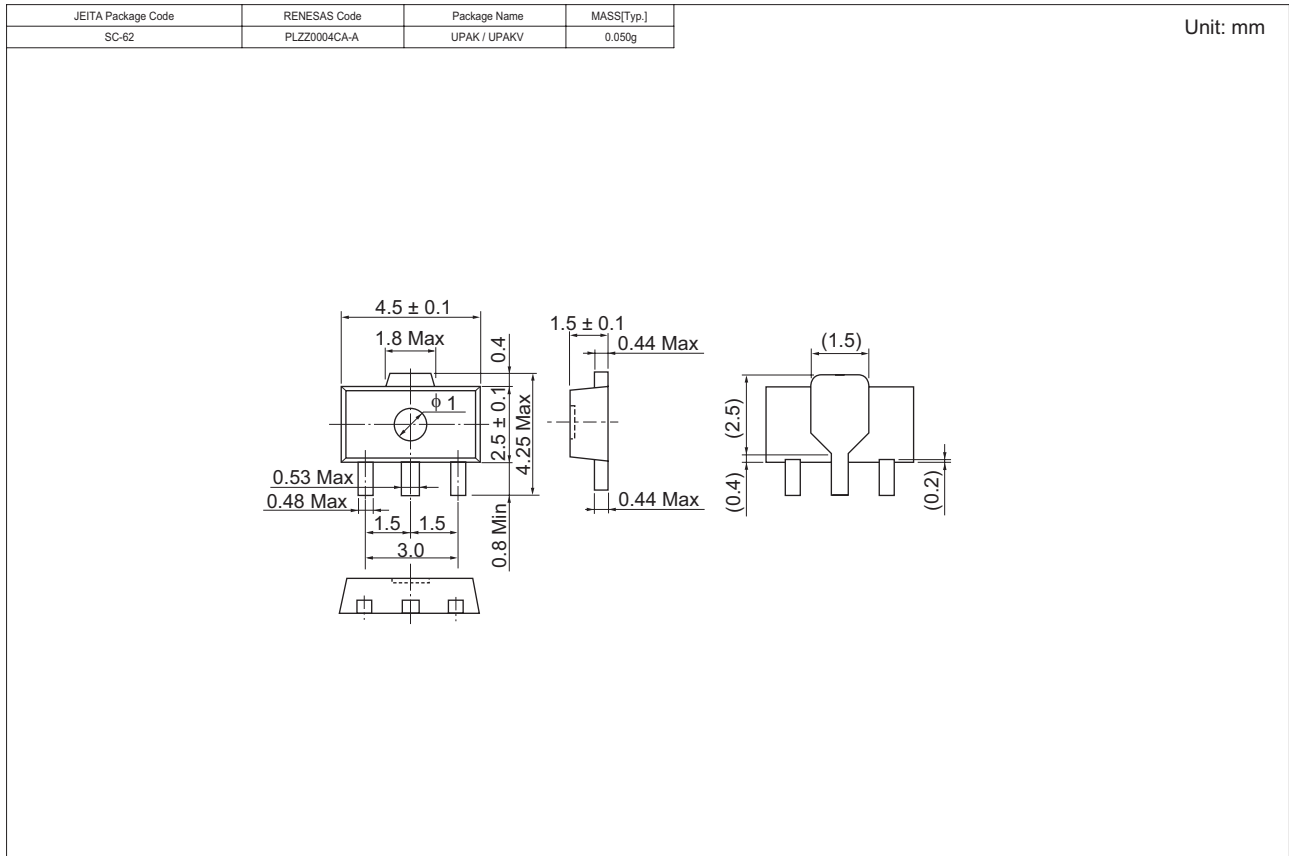
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	300	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	300	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	I_{CEO}	—	—	1	μA	$V_{CE} = 250 \text{ V}, R_{BE} = \infty$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.5	V	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$
DC current transfer ratio	h_{FE}	30	—	200		$V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$
Gain bandwidth product	f_T	—	80	—	MHz	$V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$
Collector output capacitance	C_{ob}	—	—	4	pF	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

Main Characteristics





Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC3380ASTR-E	1000	ϕ 178 mm Reel, 12 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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