

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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Not recommended
for new design

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2SC4260

Silicon NPN Epitaxial

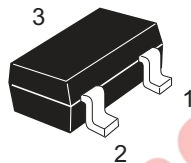
REJ03G0718-0300
 (Previous ADE-208-1098A)
 Rev.3.00
 Aug.10.2005

Application

UHF frequency converter, Wide band amplifier

Outline

RENESAS Package code: PTSP0003ZA-A
 (Package name: CMPAK[®])



1. Emitter
2. Base
3. Collector

Note: Marking is "TI-".

*CMPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	13	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics

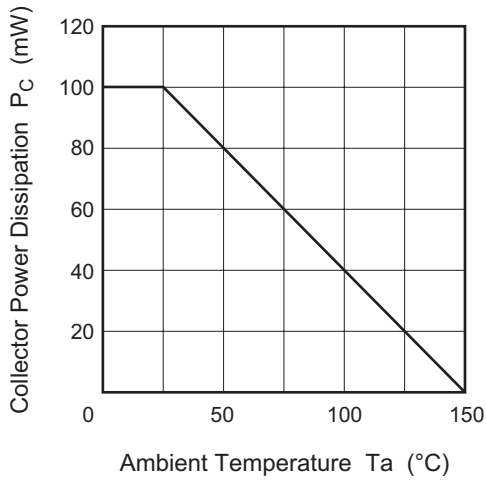
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	25	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{CB} = 15 V, I_E = 0$
	I_{CEO}	—	—	10	μA	$V_{CE} = 13 V, R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	0.3	μA	$V_{EB} = 3 V, I_C = 0$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C = 20 mA, I_B = 4 mA$
DC current transfer ratio	h_{FE}	50	—	180		$V_{CE} = 5 V, I_C = 5 mA$
Collector output capacitance	C_{ob}	—	0.85	1.3	pF	$V_{CB} = 10 V, I_E = 0, f = 1MHz$
Gain bandwidth product	f_T	3.0	3.8	—	GHz	$V_{CE} = 5 V, I_C = 5 mA$
Conversion gain	CG	—	19	—	dB	$V_{CC} = 5 V, I_C = 0.8 mA,$ $f = 900 MHz$
Noise figure	NF	—	8	—	dB	$f_{OSC} = 930 MHz (-5dBm),$ $f_{out} = 30 MHz$

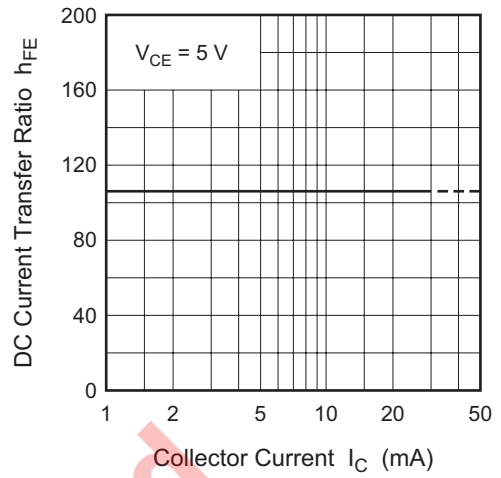
Not recommend
for new design

Main Characteristics

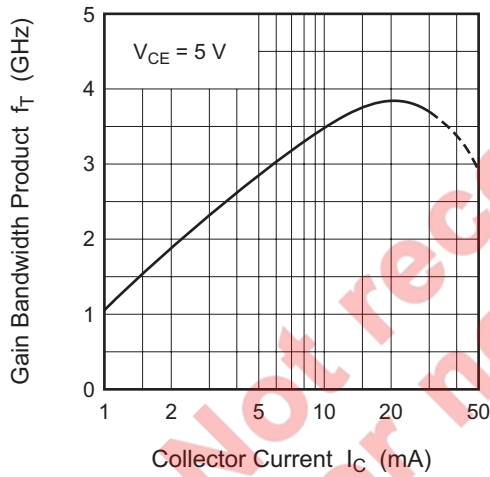
Maximum Collector Dissipation Curve



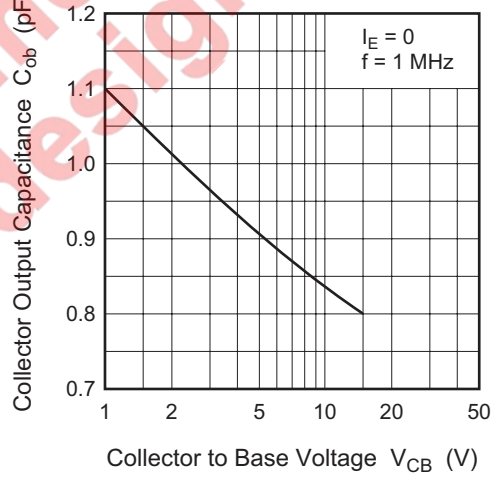
DC Current Transfer Ratio vs. Collector Current



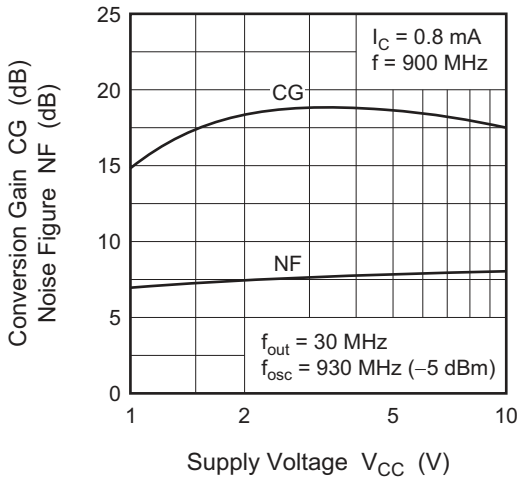
Gain Bandwidth Product vs. Collector Current



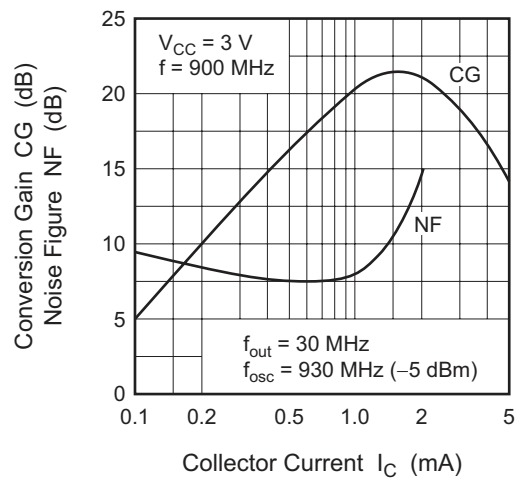
Collector Output Capacitance vs. Collector to Base Voltage



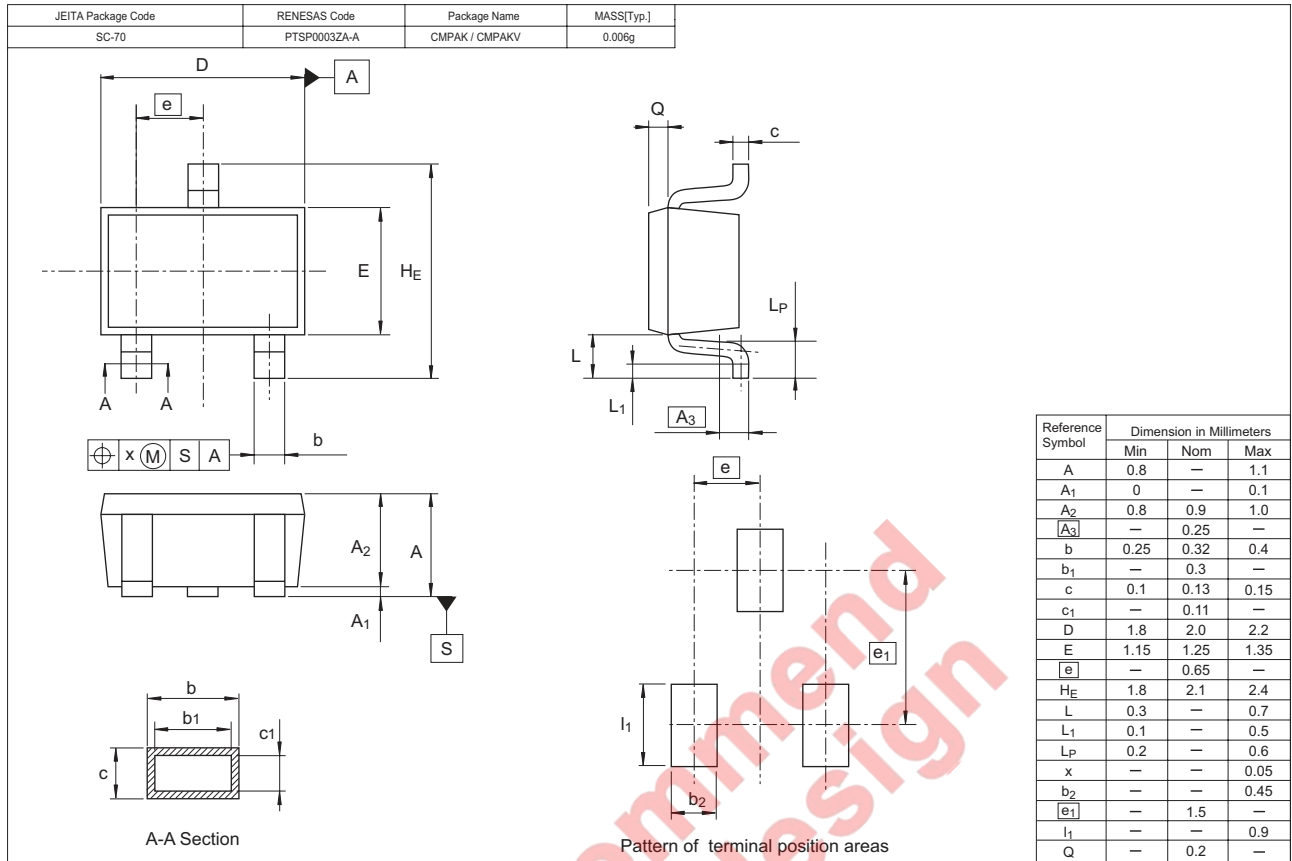
Conversion Gain, Noise Figure vs. Supply Voltage



Conversion Gain, Noise Figure vs. Collector Current



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC4260TI-TL-E	3000	φ 178 mm Reel, 8 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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