

2SC4264

Silicon NPN Epitaxial

REJ03G0721-0300
(Previous ADE-208-1101A)

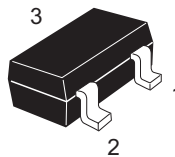
Rev.3.00

Aug.10.2005

Application

VHF / UHF RF amplifier, Local oscillator, Mixer

Outline

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

1. Emitter
2. Base
3. Collector

Note: Marking is "GC".

*CMPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

(Ta = 25°C)

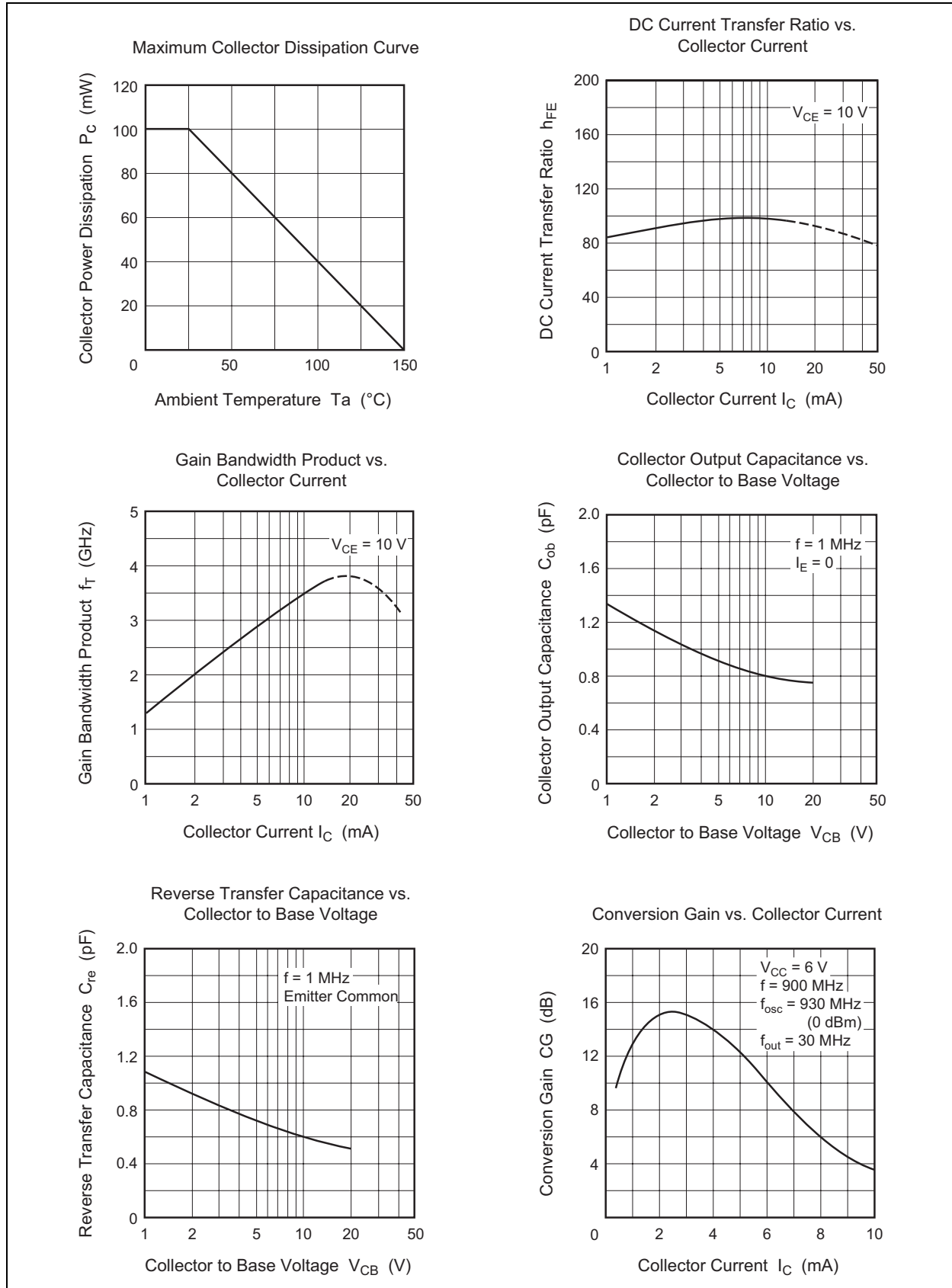
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	20	V
Collector to emitter voltage	V_{CEO}	11	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics

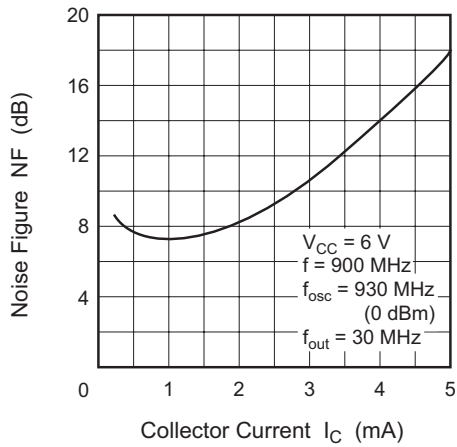
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	20	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector cutoff current	I_{CBO}	—	—	0.5	μA	$V_{CB} = 15 V, I_E = 0$
	I_{CEO}	—	—	10	μA	$V_{CE} = 11 V, R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	1.0	μA	$V_{EB} = 3 V, I_C = 0$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.7	V	$I_C = 10 mA, I_B = 5 mA$
DC current transfer ratio	h_{FE}	20	—	—		$V_{CE} = 10 V, I_C = 5 mA$
Collector output capacitance	C_{ob}	—	—	1.5	pF	$V_{CB} = 10 V, I_E = 0, f = 1 MHz$
Gain bandwidth product	f_T	1.4	—	—	GHz	$V_{CE} = 10 V, I_C = 10 mA$

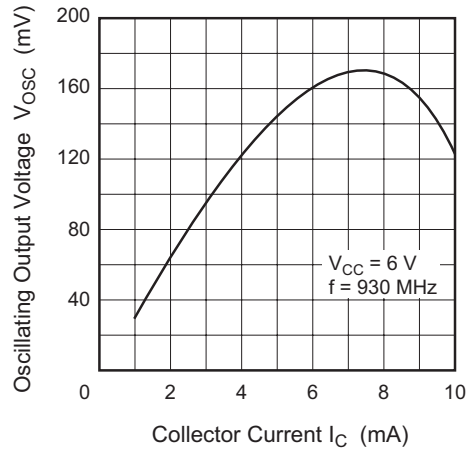
Main Characteristics



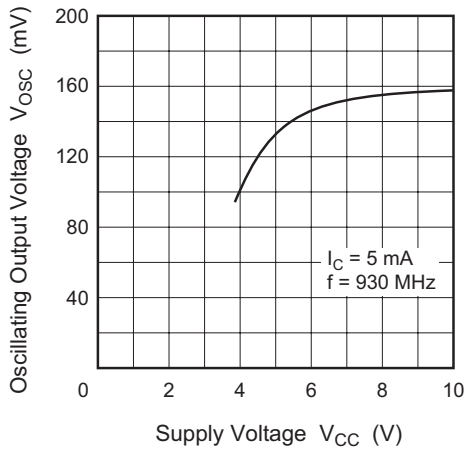
Noise Figure vs. Collector Current



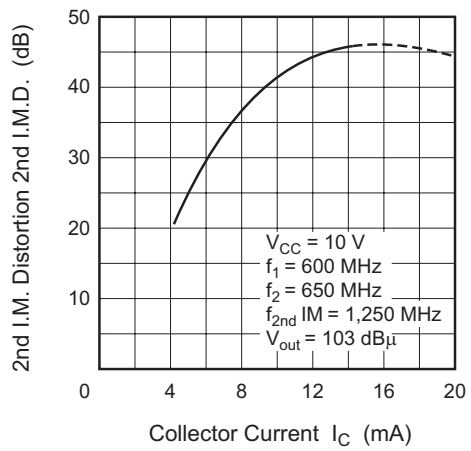
Oscillating Output Voltage vs. Collector Current



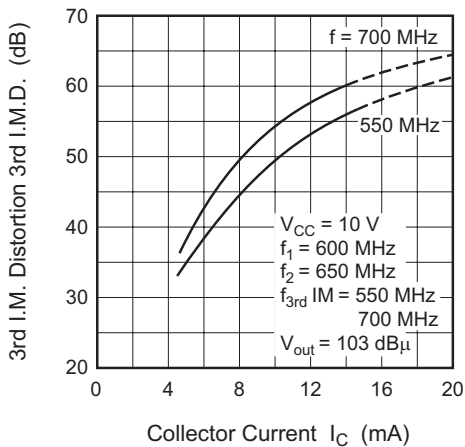
Oscillating Output Voltage vs. Supply Voltage



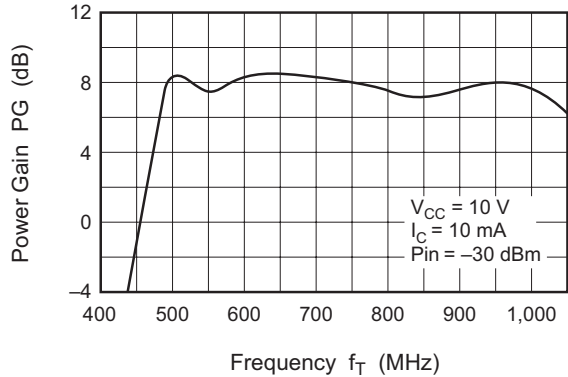
2nd I.M. Distortion vs. Collector Current



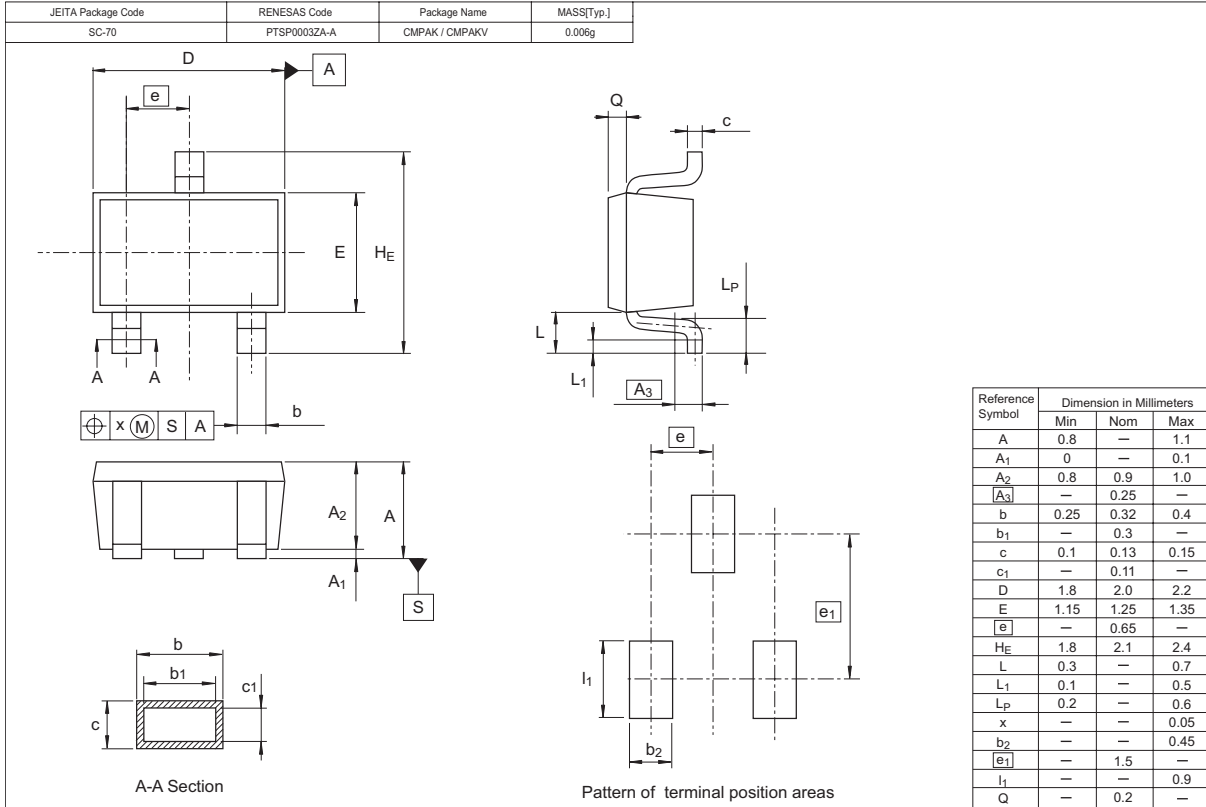
3rd I.M. Distortion vs. Collector Current



Power Gain vs. Frequency



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC4264GCTR-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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