

# 2SC4260

## Silicon NPN Epitaxial

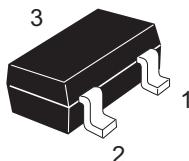
REJ03G0718-0300  
 (Previous ADE-208-1098A)  
 Rev.3.00  
 Aug.10.2005

### 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)

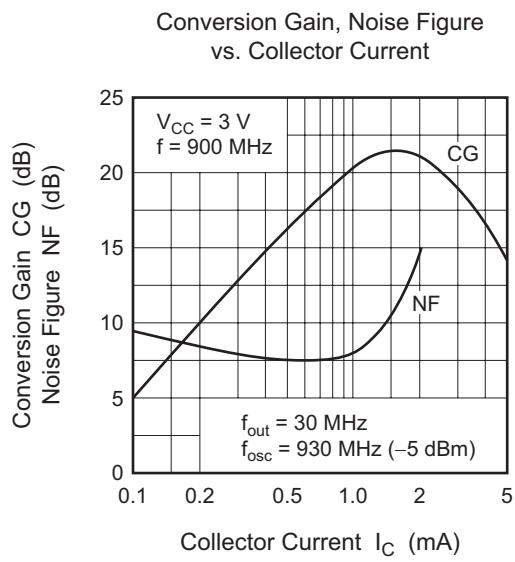
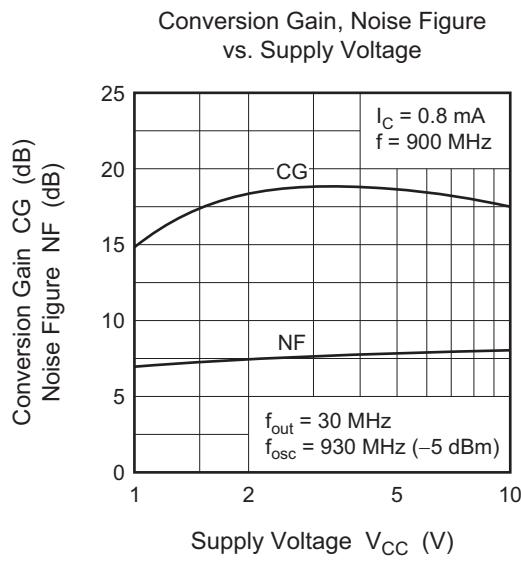
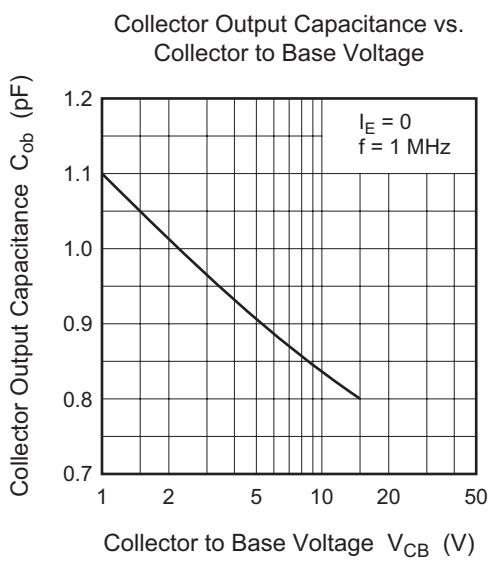
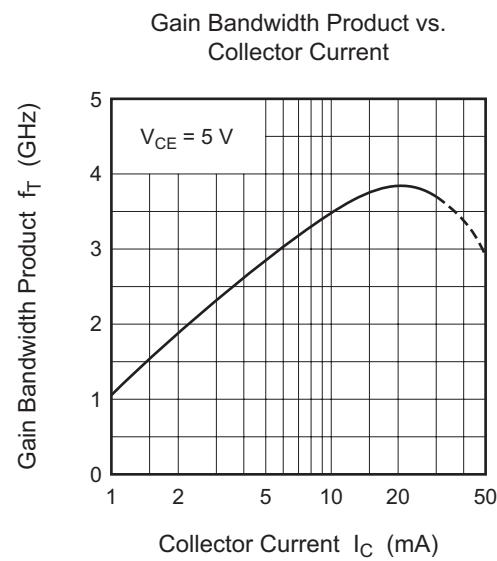
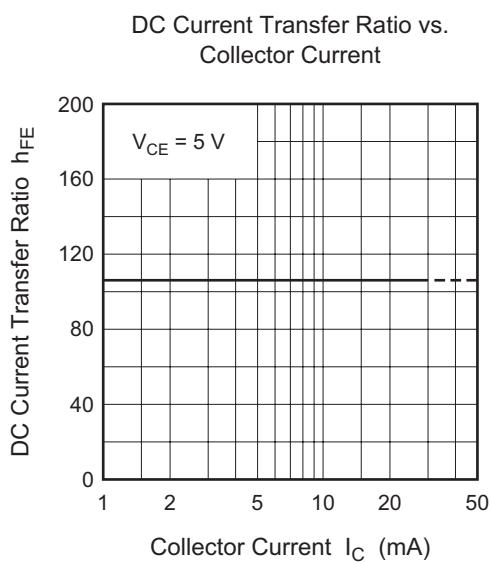
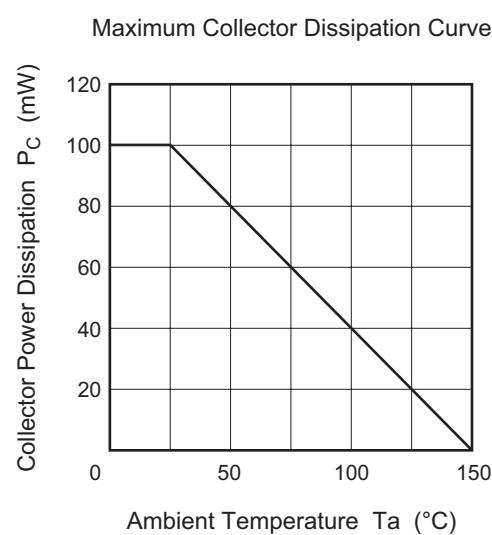
Item	Symbol	Ratings	Unit
Collector to base voltage	V <sub>CBO</sub>	25	V
Collector to emitter voltage	V <sub>CEO</sub>	13	V
Emitter to base voltage	V <sub>EBO</sub>	3	V
Collector current	I <sub>C</sub>	50	mA
Collector power dissipation	P <sub>C</sub>	100	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

## Electrical Characteristics

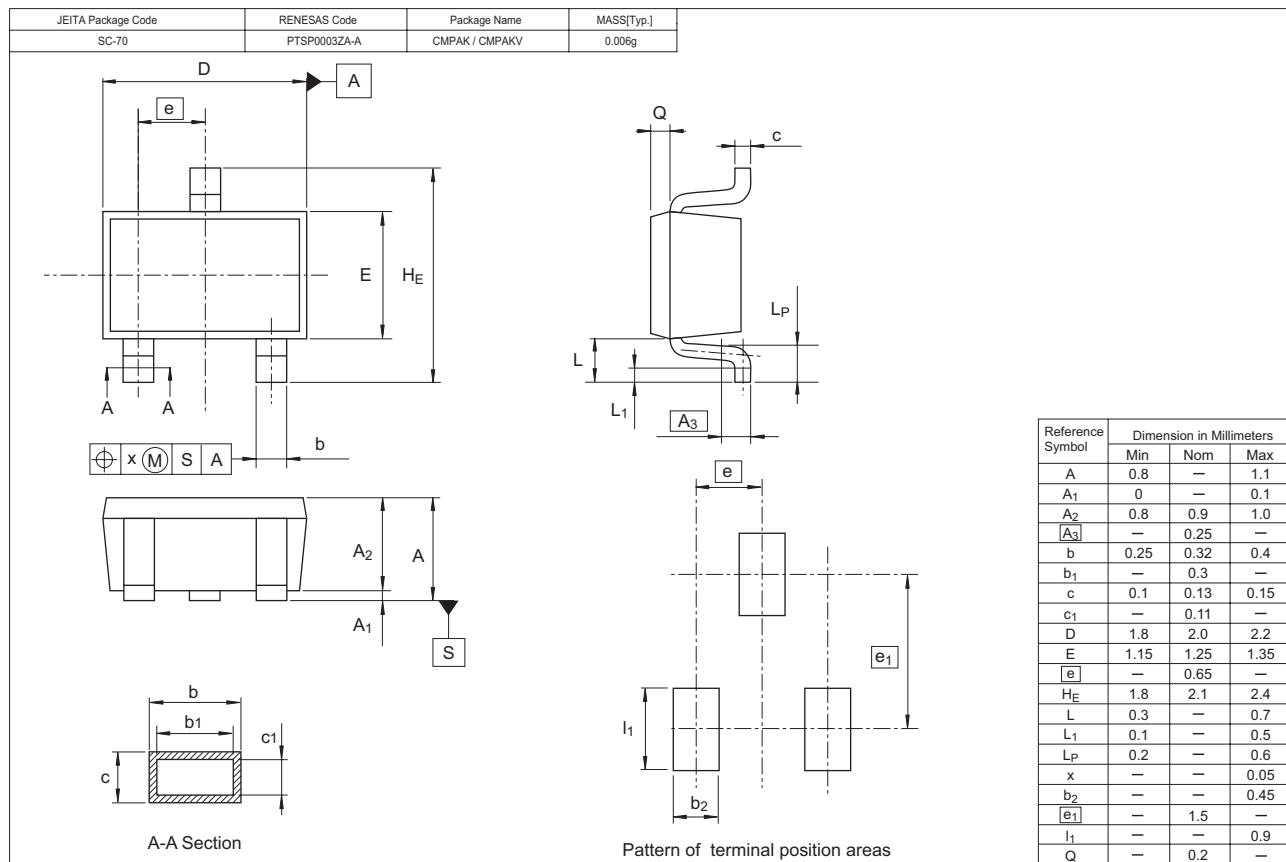
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	V <sub>(BR)CBO</sub>	25	—	—	V	I <sub>C</sub> = 10 µA, I <sub>E</sub> = 0
Collector cutoff current	I <sub>CBO</sub>	—	—	0.1	µA	V <sub>CB</sub> = 15 V, I <sub>E</sub> = 0
	I <sub>CEO</sub>	—	—	10	µA	V <sub>CE</sub> = 13 V, R <sub>BE</sub> = ∞
Emitter cutoff current	I <sub>EBO</sub>	—	—	0.3	µA	V <sub>EB</sub> = 3 V, I <sub>C</sub> = 0
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	—	—	0.3	V	I <sub>C</sub> = 20 mA, I <sub>B</sub> = 4 mA
DC current transfer ratio	h <sub>FE</sub>	50	—	180		V <sub>CE</sub> = 5 V, I <sub>C</sub> = 5 mA
Collector output capacitance	C <sub>ob</sub>	—	0.85	1.3	pF	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1MHz
Gain bandwidth product	f <sub>T</sub>	3.0	3.8	—	GHz	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 5 mA
Conversion gain	CG	—	19	—	dB	V <sub>CC</sub> = 5 V, I <sub>C</sub> = 0.8 mA, f = 900 MHz
Noise figure	NF	—	8	—	dB	f <sub>osc</sub> = 930 MHz (-5dBm), f <sub>out</sub> = 30 MHz

## Main Characteristics



## Package Dimensions



## Ordering Information

Part Name	Quantity	Shipping Container
2SC4260TI-TL-E	3000	Ø 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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