

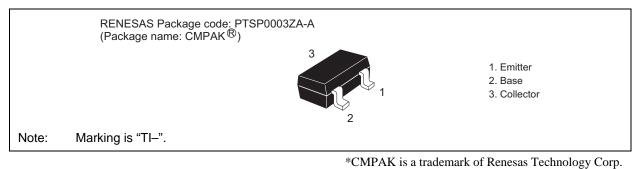
Silicon NPN Epitaxial

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

Application

UHF frequency converter, Wide band amplifier

Outline



Absolute Maximum Ratings

			$(Ta = 25^{\circ}C)$
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	Pc	100	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

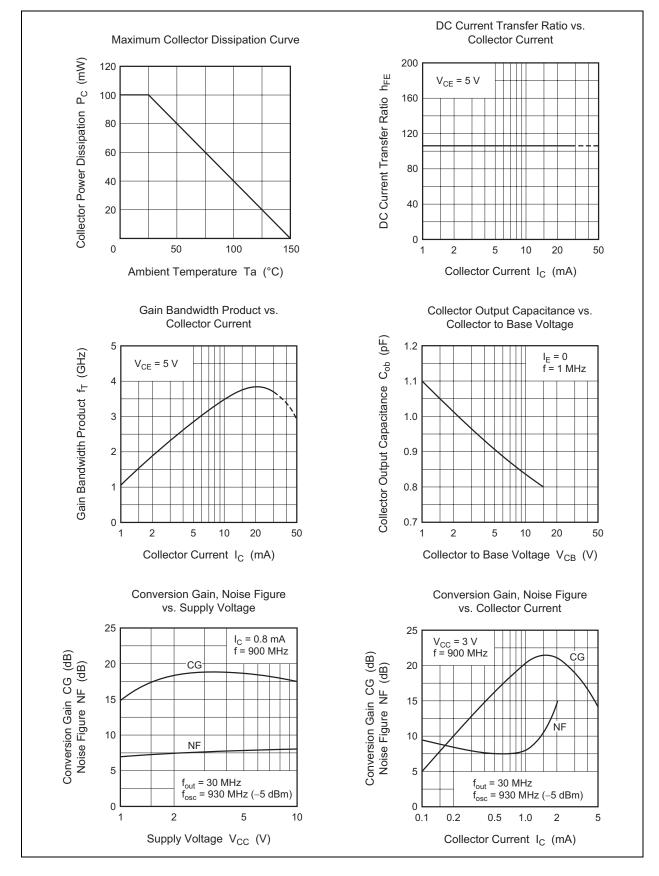


Electrical Characteristics

						$(Ta = 25^{\circ}C)$
Item	Symbol	Min	Тур	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	μΑ	$V_{CB} = 15 \text{ V}, \text{ I}_{E} = 0$
	I _{CEO}	—	—	10	μΑ	V_{CE} = 13 V, R_{BE} = ∞
Emitter cutoff current	I _{EBO}	—	—	0.3	μΑ	$V_{EB} = 3 V, I_{C} = 0$
Collector to emitter saturation voltage	V _{CE(sat)}			0.3	V	$I_{C} = 20 \text{ mA}, I_{B} = 4 \text{ mA}$
DC current transfer ratio	h _{FE}	50	—	180		$V_{CE} = 5 \text{ V}, I_{C} = 5 \text{ mA}$
Collector output capacitance	Cob	—	0.85	1.3	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1MHz$
Gain bandwidth product	f _T	3.0	3.8	—	GHz	$V_{CE} = 5 \text{ V}, I_{C} = 5 \text{ mA}$
Conversion gain	CG	_	19	—	dB	$V_{CC} = 5 \text{ V}, I_C = 0.8 \text{ mA},$
						f = 900 MHz
Noise figure	NF	—	8	—	dB	f _{OSC} = 930 MHz (–5dBm),
						f _{out} = 30 MHz



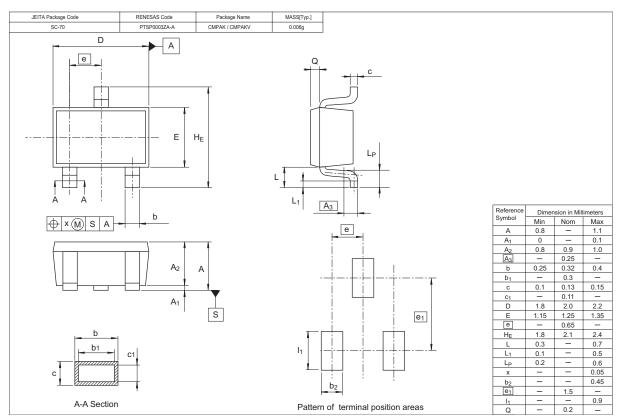
Main Characteristics



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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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