

Silicon NPN Epitaxial

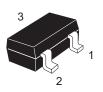
REJ03G0719-0300 (Previous ADE-208-1099A) Rev.3.00 Aug.10.2005

Application

UHF Local oscillator

Outline

RENESAS Package code: PTSP0003ZA-A (Package name: CMPAK $^{\circledR}$)



1. Emitter

2. Base

3. Collector

Note: Marking is "QI-".

*CMPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

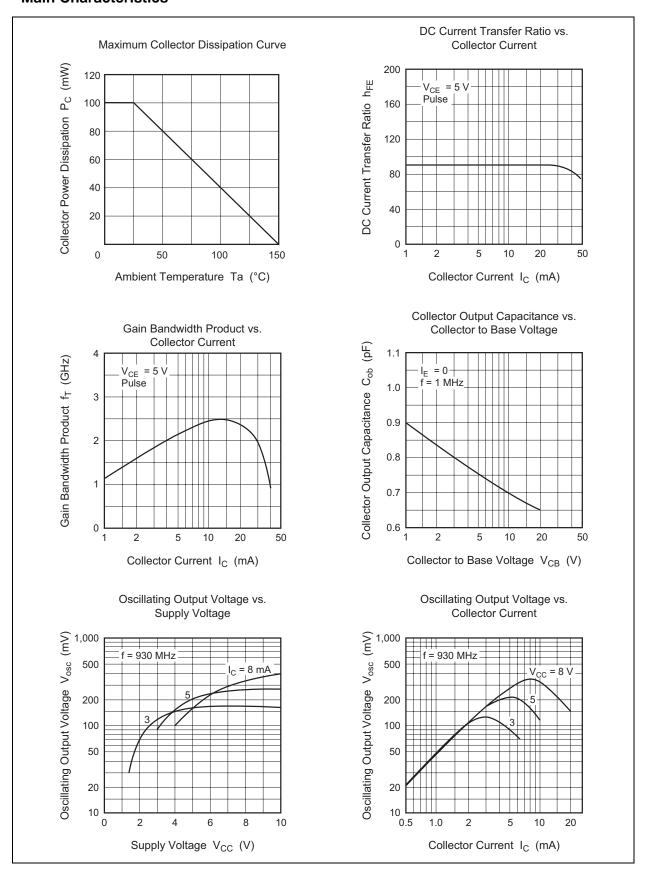
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	25	V
Collector to emitter voltage	V _{CEO}	15	V
Emitter to base voltage	V _{EBO}	3	V
Collector current	Ic	50	mA
Collector power dissipation	Pc	100	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Electrical Characteristics

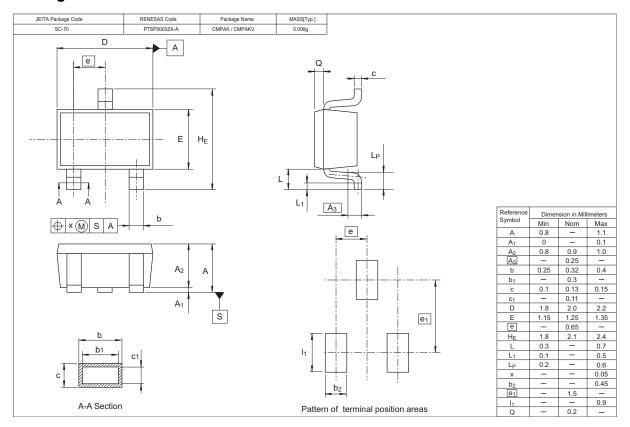
 $(Ta = 25^{\circ}C)$

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}	_	_	0.3	μΑ	$V_{CB} = 15 \text{ V}, I_{E} = 0$
	I _{CEO}	_	_	10	μΑ	$V_{CE} = 15 \text{ V}, R_{BE} = \infty$
Emitter cutoff current	I _{EBO}	_	_	1.0	μΑ	$V_{EB} = 3 \text{ V}, I_{C} = 0$
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	_	0.7	1.0	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1MHz$
Gain bandwidth product	f _T	1.8	2.4	_	GHz	$V_{CE} = 5 \text{ V}, I_{C} = 20 \text{ mA}$
Oscillating output voltage	Vosc	_	200	_	mV	$V_{CC} = 5 \text{ V}, I_C = 5 \text{ mA},$
						f = 930 MHz

Main Characteristics



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC4261QI-TR-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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