

Silicon NPN Epitaxial Planar

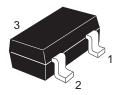
REJ03G0704-0200 (Previous ADE-208-1071) Rev.2.00 Aug.10.2005

Application

VHF amplifier, Local oscillator

Outline

RENESAS Package code: PLSP0003ZB-A (Package name: MPAK)



1. Emitter 2. Base

3. Collector

Absolute Maximum Ratings

			$(Ta = 25^{\circ}C)$
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	30	V
Collector to emitter voltage	V _{CEO}	20	V
Emitter to base voltage	V _{EBO}	4	V
Collector current	Ι _C	20	mA
Collector power dissipation	Pc	100	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C



Electrical Characteristics

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

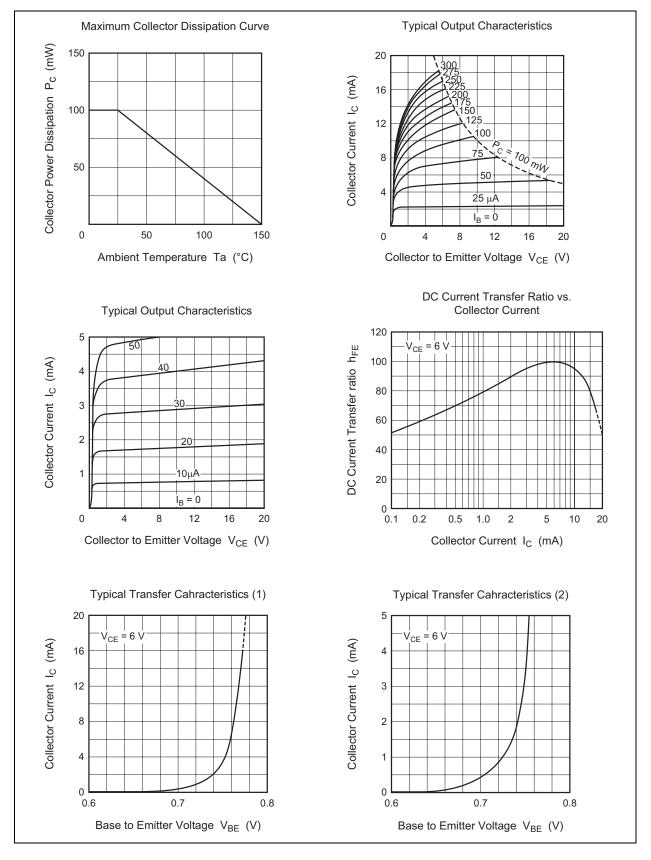
ltem	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	30	_	_	V	$I_{C} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	V _{(BR)CEO}	20	_	_	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	V _{(BR)EBO}	4	_		V	$I_E = 10 \ \mu A, \ I_C = 0$
Collector cutoff current	I _{CBO}	—	_	0.5	μΑ	$V_{CB} = 10 \text{ V}, I_{C} = 0$
Emitter cutoff current	I _{EBO}	—	_	0.5	μΑ	$V_{EB} = 2 V, I_C = 0$
DC current transfer ratio	h _{FE} * ¹	60	_	200		$V_{CE} = 6 V, I_C = 1 mA$
Collector to emitter saturation voltage	V _{CE(sat)}	—	0.17	_	V	$I_{C} = 20 \text{ mA}, I_{B} = 4 \text{ mA}$
Base to emitter voltage	V_{BE}	_	0.72	_	V	$V_{CE} = 6 \text{ mA}, I_C = 1 \text{ mA}$
Gain bandwidth product	f _T	—	940	—	MHz	$V_{CE} = 6 \text{ V}, \text{ I}_{C} = 5 \text{ mA}$
Collector output capacitance	Cob	—	0.9	—	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$
	6 11	•			•	•

Note: 1. The 2SC2620 is grouped by h_{FE} as follows.

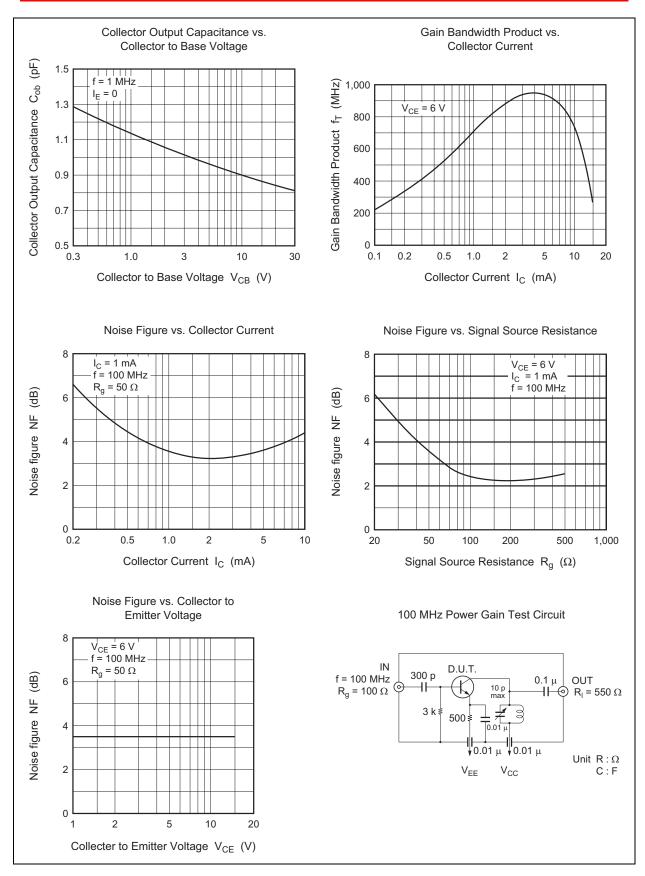
Grade	В	С	
Mark	QB	QC	
h _{FE}	60 to 120	100 to 200	



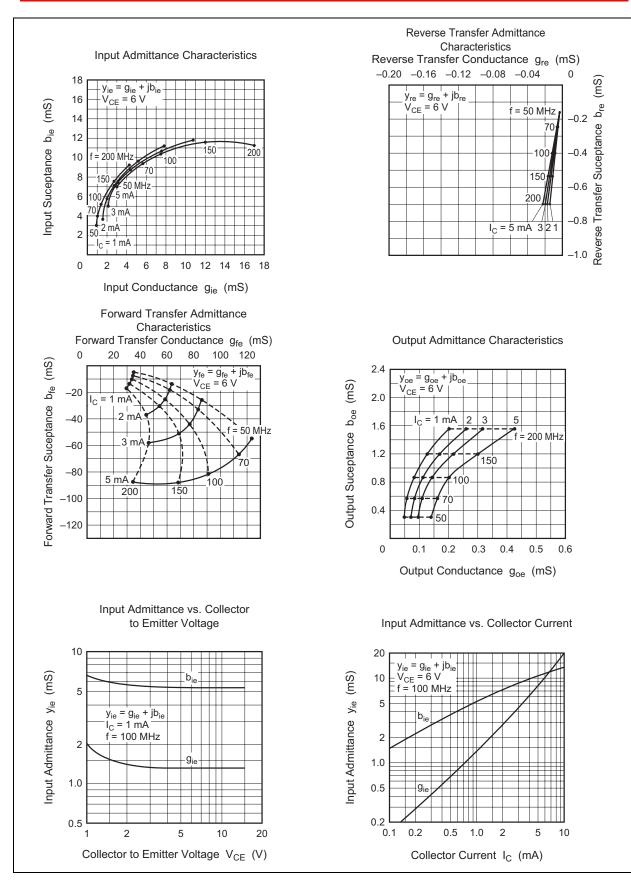
Main Characteristics



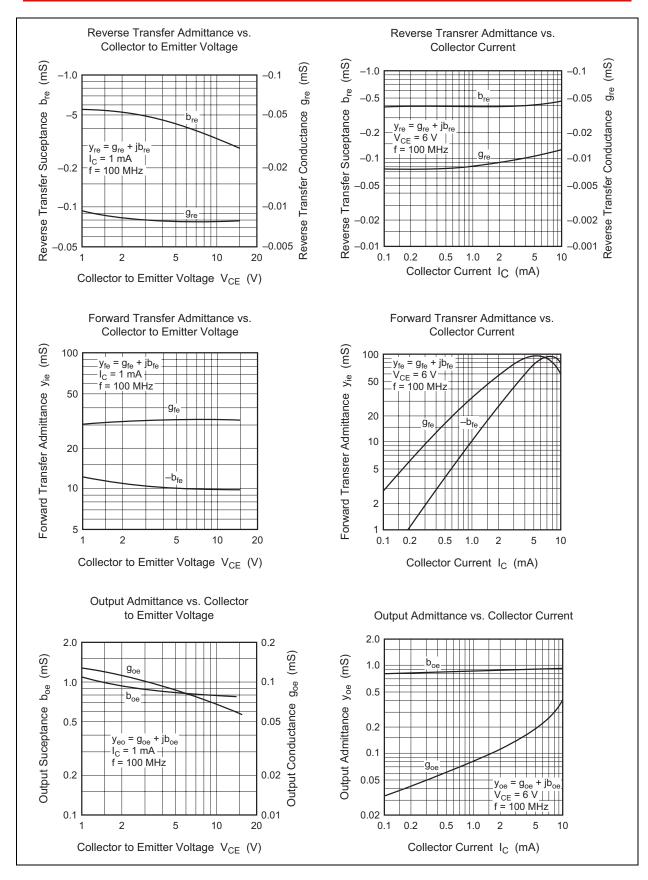






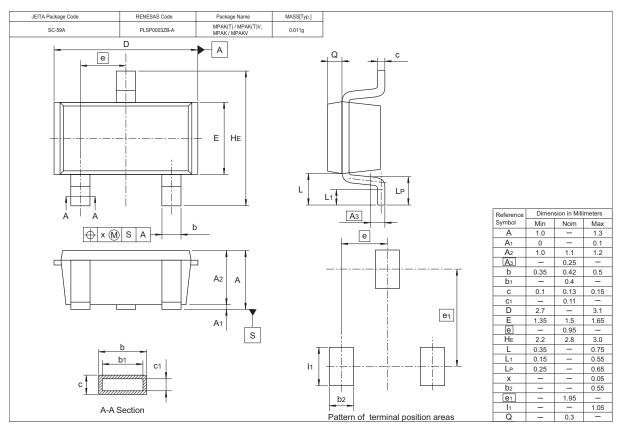








Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC2620QBTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SC2620QCTL-E		

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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