

2SC5850

Silicon NPN Epitaxial

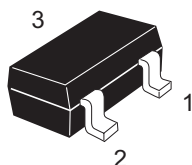
REJ03G0760-0100
(Previous ADE-208-1479)
Rev.1.00
Aug.10.2005

Features

Low frequency amplifier

Outline

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



- 1. Emitter
- 2. Base
- 3. Collector

*CMPAK is a trademark of Renesas Technology Corp.

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	40	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Emitter current	I_E	-100	mA
Collector power dissipation	P_C^*	150	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 to +125	°C

*Value on the glass epoxy board (10 mm x 10 mm x 0.7 mm)

Electrical Characteristics

(Ta = 25°C)

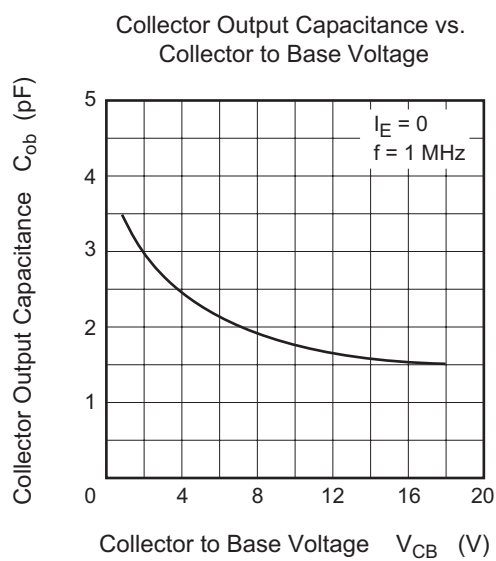
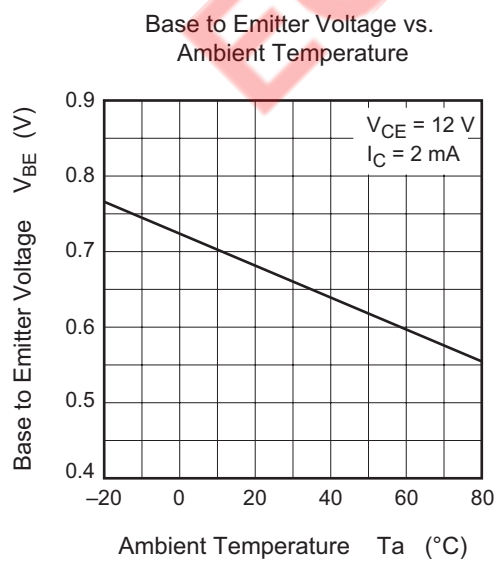
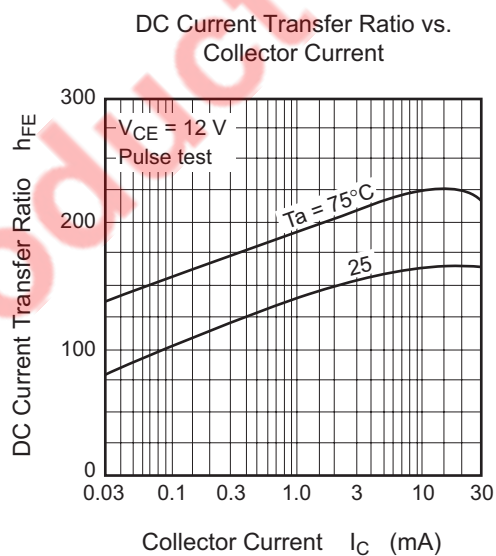
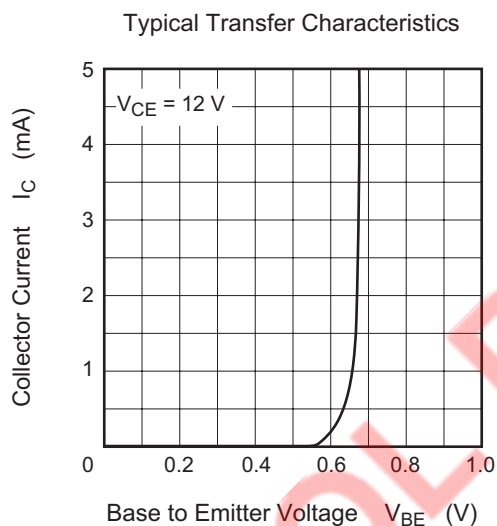
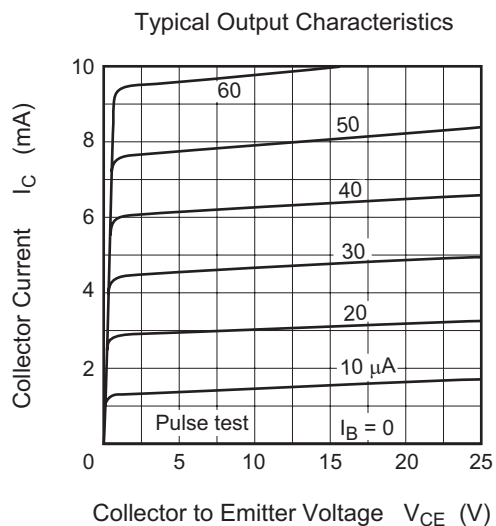
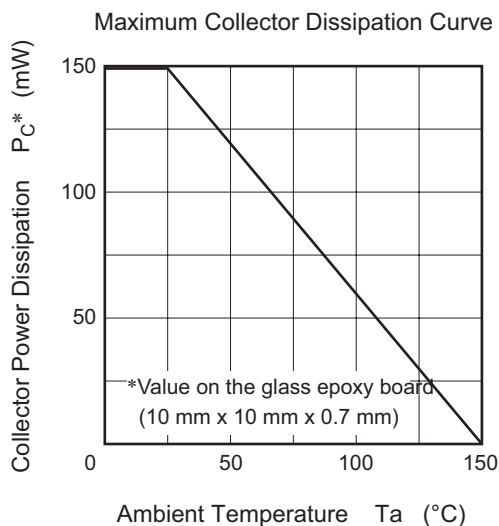
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	50	—	—	V	$I_C = 10\ \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	40	—	—	V	$I_C = 1\ mA, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10\ \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	0.5	μA	$V_{CB} = 30\ V, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	0.5	μA	$V_{EB} = 2\ V, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	100	—	500		$V_{CE} = 12\ V, I_C = 2\ mA$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.2	V	$I_C = 10\ mA, I_B = 1\ mA$
Base to emitter voltage	V_{BE}	—	—	0.75	V	$V_{CE} = 12\ V, I_C = 2\ mA$

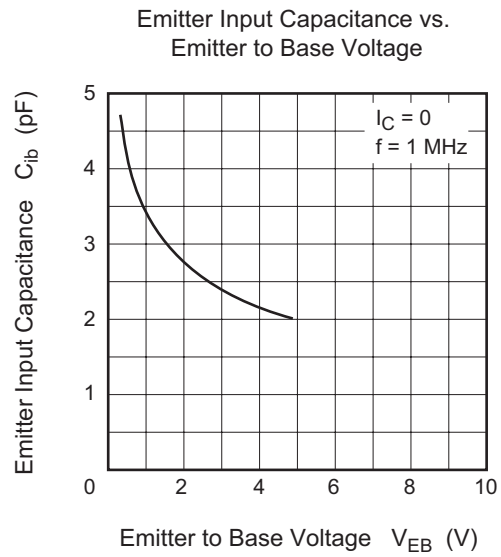
Notes: 1. The 2SC5850 is grouped by h_{FE} as follows.

Grade	B	C	D
Mark	LB	LC	LD
h_{FE}	100 to 200	160 to 320	250 to 500

EOL Product

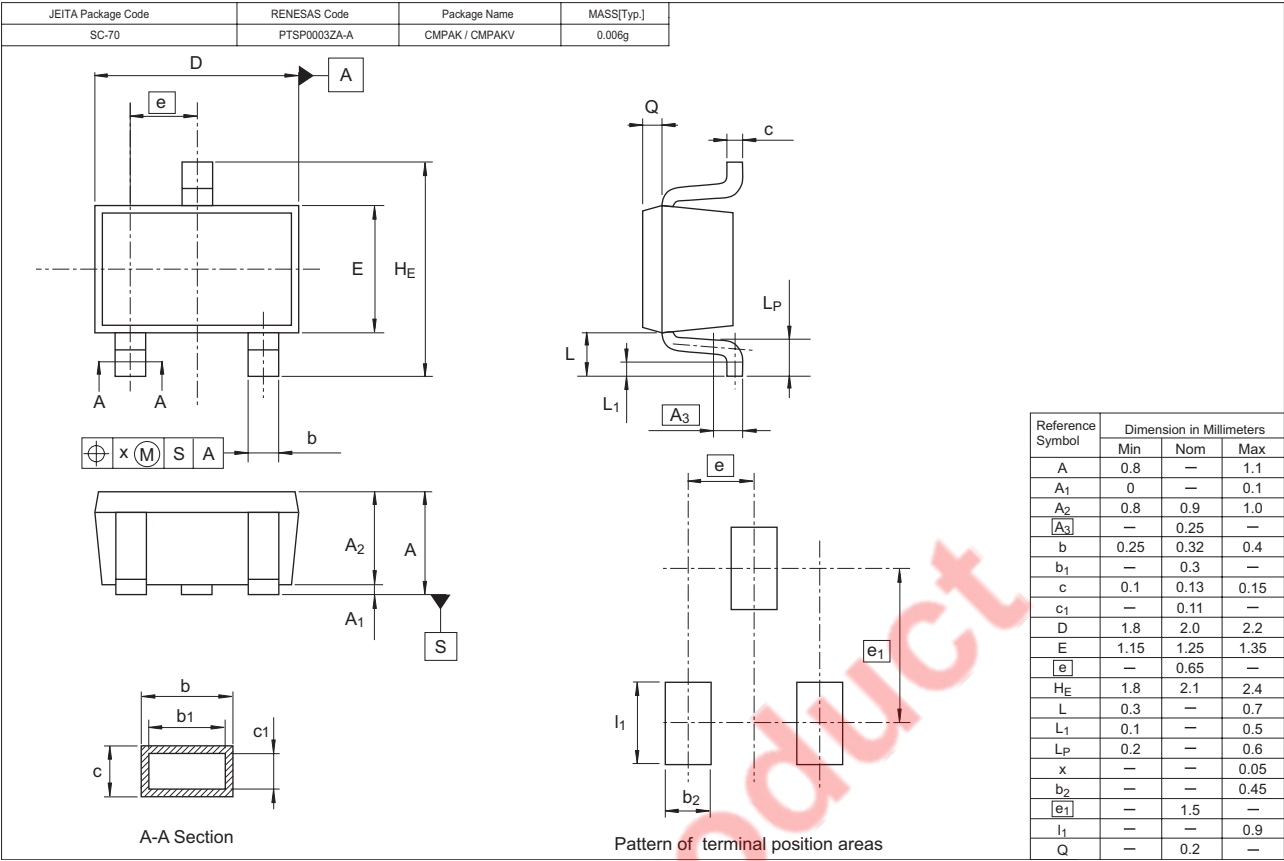
Main Characteristics





EOL Product

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC5850LBTL-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SC5850LCTL-E		
2SC5850LDTL-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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