

2SC4050

R07DS0274EJ0300
 (Previous: REJ03G0715-0200)
 Rev.3.00
 Mar 28, 2011

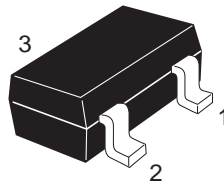
Silicon NPN Epitaxial

Application

Low frequency amplifier, switching

Outline

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



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

Note: Marking is "KIE".

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	120	V
Collector to emitter voltage	V_{CEO}	120	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

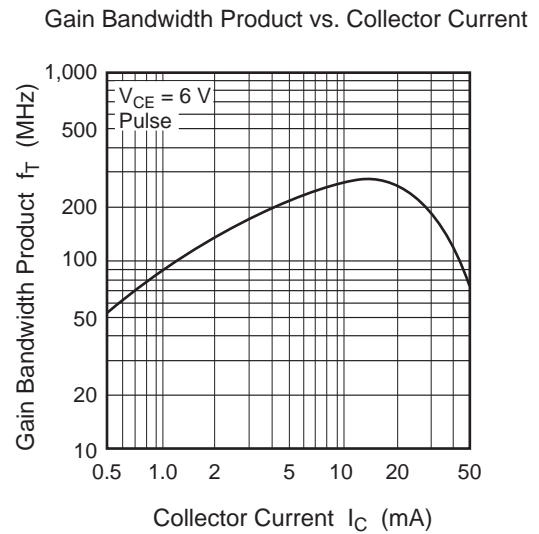
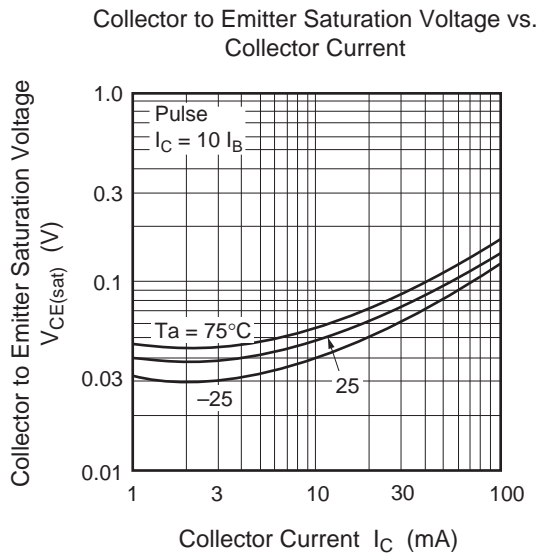
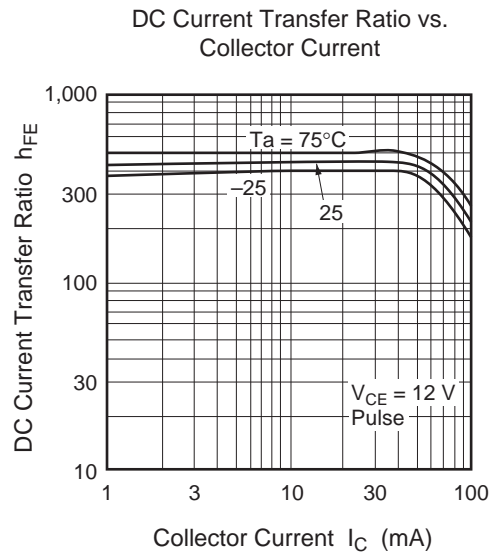
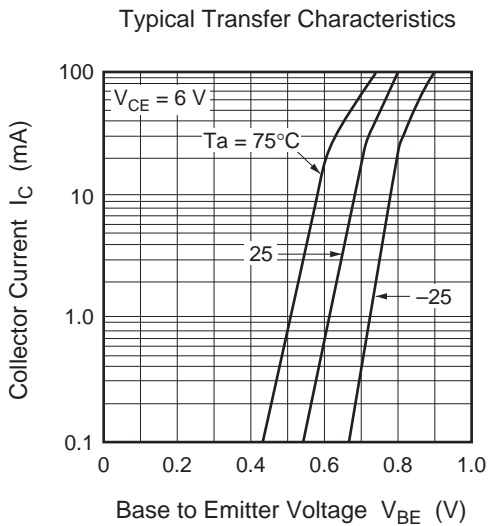
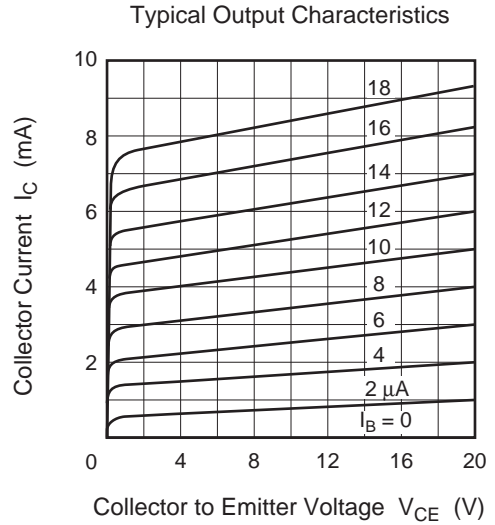
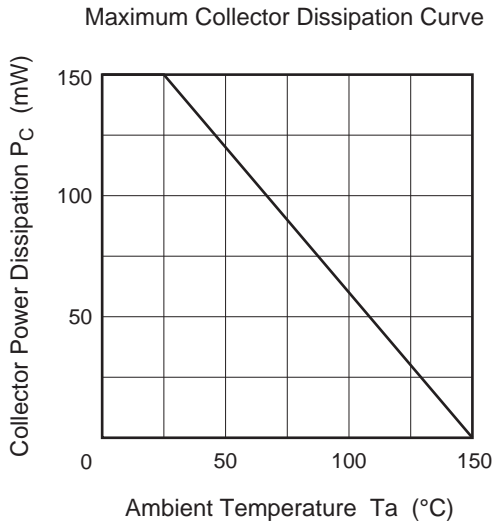
Electrical Characteristics

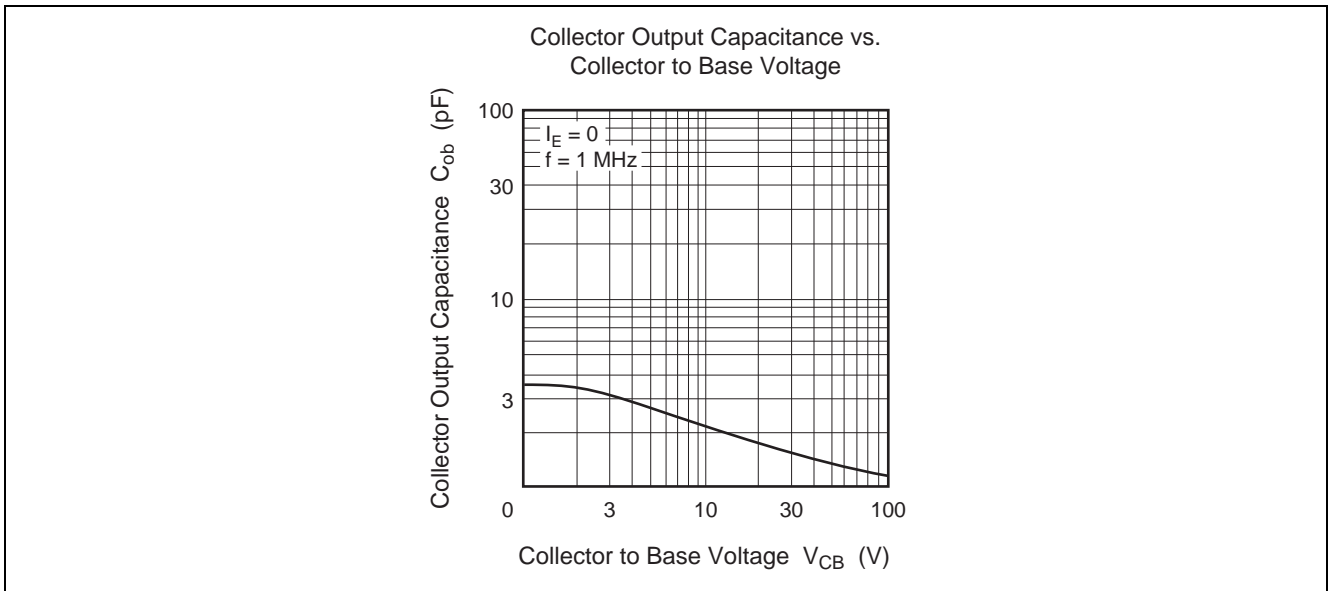
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	120	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	120	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{CB} = 70 \text{ V}, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	0.1	μA	$V_{EB} = 2 \text{ V}, I_C = 0$
DC current transfer ratio	h_{FE}	400	—	800		$V_{CE} = 12 \text{ V}, I_C = 2 \text{ mA}^{*1}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.1	V	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.1	V	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}^{*1}$

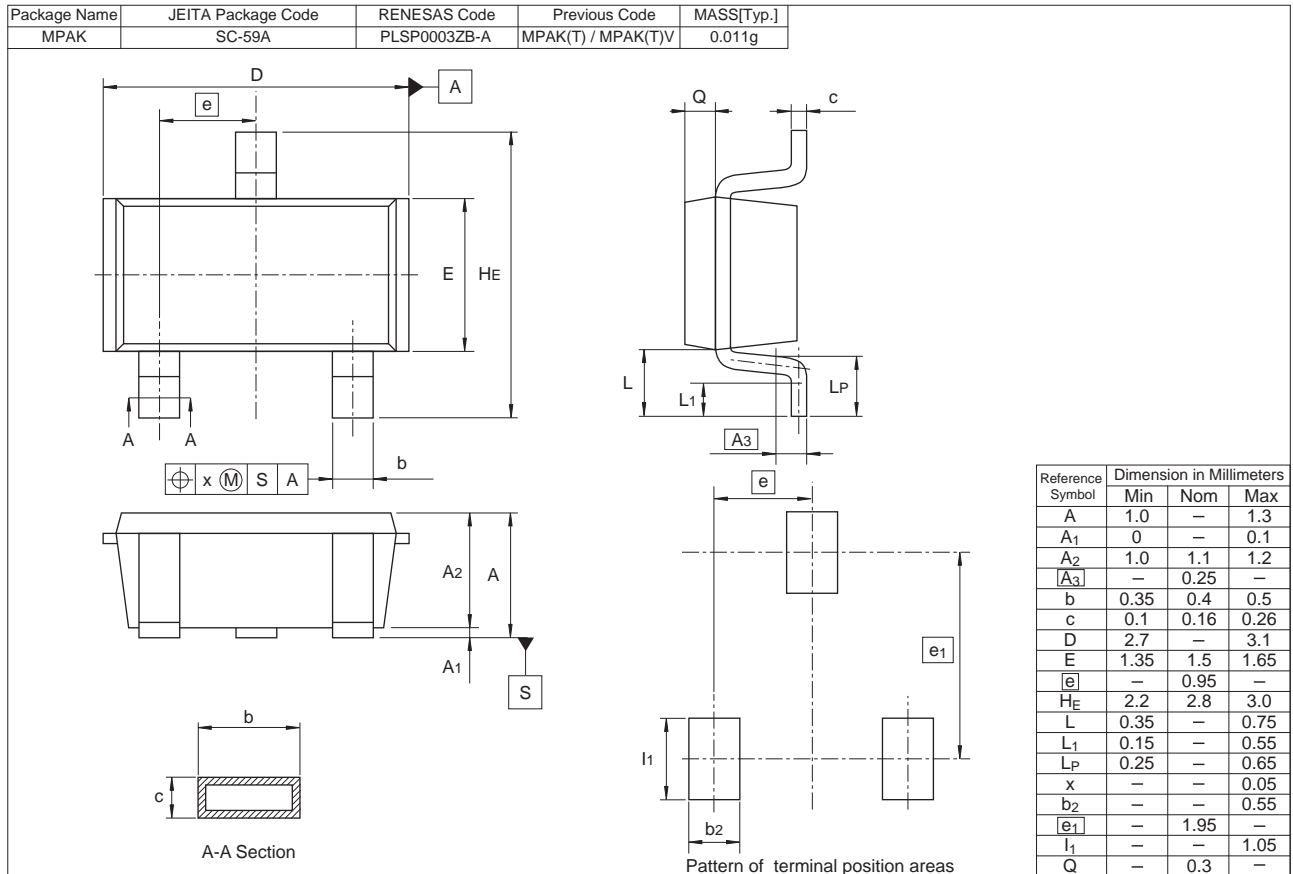
Notes: 1. Pulse test

Main Characteristics





Package Dimensions



Ordering Information

Orderable Part Number	Quantity	Shipping Container
2SC4050KIETR-E	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SC4050KIETR-H		

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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