2SD1472

Silicon NPN Epitaxial, Darlington

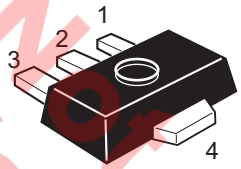
REJ03G0792-0300
Rev.3.00
Nov 30, 2007

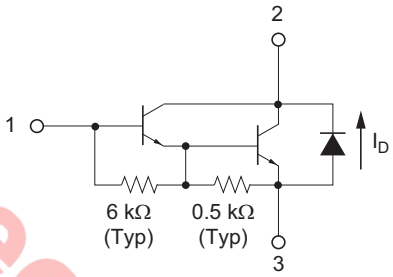
Application

Low frequency power amplifier

Outline

RENESAS Package code: PLZZ0004CA-A
(Package name: UPAK®)





1. Base
2. Collector
3. Emitter
4. Collector (Flange)

Note: Marking is "CT".

*UPAK is a trademark of Renesas Technology Corp.

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}	7	V
Collector current	I_C	1.5	A
Collector peak current	$i_{C(peak)}$*[1]	3.0	A
Collector power dissipation	P_C*[2]	1.0	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C
E to C diode forward current	I_D	1.5	A

Notes: 1. Pulse ≤ 10 ms, Duty cycle ≤ 20%
2. Value on the alumina ceramic board (12.5 x 30 x 0.7 mm)

Electrical Characteristics

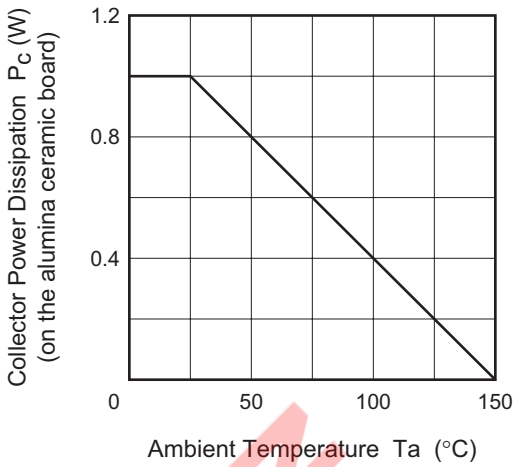
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	120	—	—	V	I_C = 0.1 mA, I_E = 0
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	120	—	—	V	I_C = 10 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	7	—	—	V	I_E = 50 mA, I_C = 0
Collector cutoff current	I_{CBO}	—	—	1.0	µA	V_{CB} = 100 V, I_E = 0
	I_{CEO}	—	—	10	µA	V_{CE} = 100 V, R_{BE} = ∞
DC current transfer ratio	h_{FE}	2000	—	30000		V_{CE} = 3 V, I_C = 1 A*[1]
Collector to emitter saturation voltage	$V_{CE(sat)1}$	—	—	1.5	V	I_C = 1 A, I_B = 1 mA*[1]
	$V_{CE(sat)2}$	—	—	2.0	V	I_C = 1.5 A, I_B = 1.5 mA*[1]
Base to emitter saturation voltage	$V_{BE(sat)1}$	—	—	2.0	V	I_C = 1 A, I_B = 1 mA*[1]
	$V_{BE(sat)2}$	—	—	2.5	V	I_C = 1.5 A, I_B = 1.5 mA*[1]
E to C diode forward voltage	V_D	—	—	3.0	V	I_D = 1.5 A*[1]

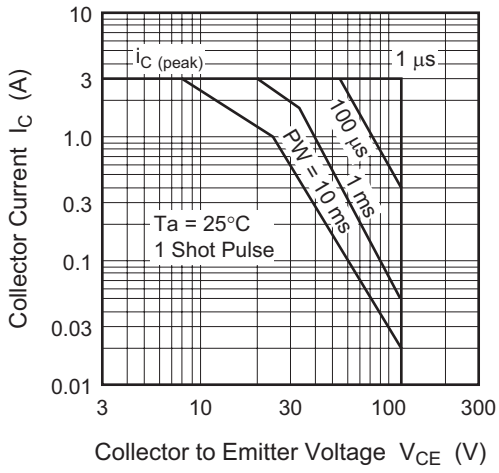
Notes: 1. Pulse test

Main Characteristics

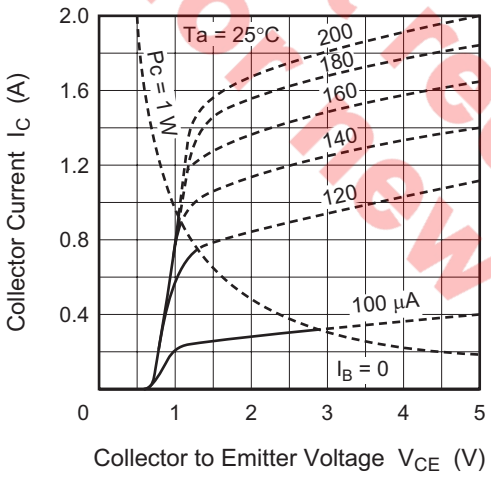
Maximum Collector Dissipation Curve



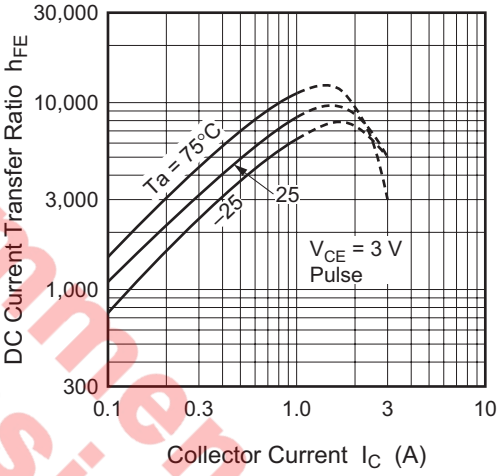
Area of Safe Operation



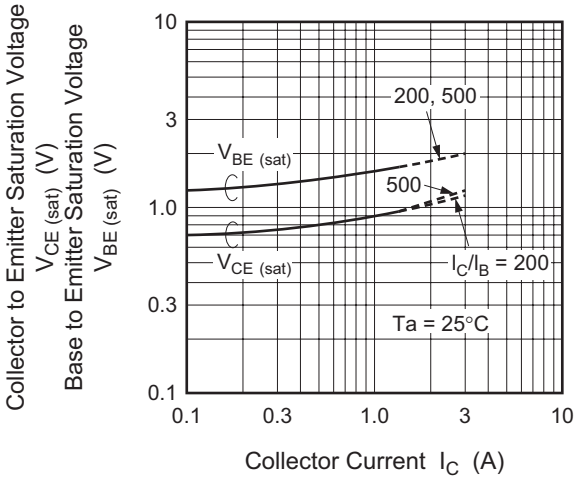
Typical Output Characteristics

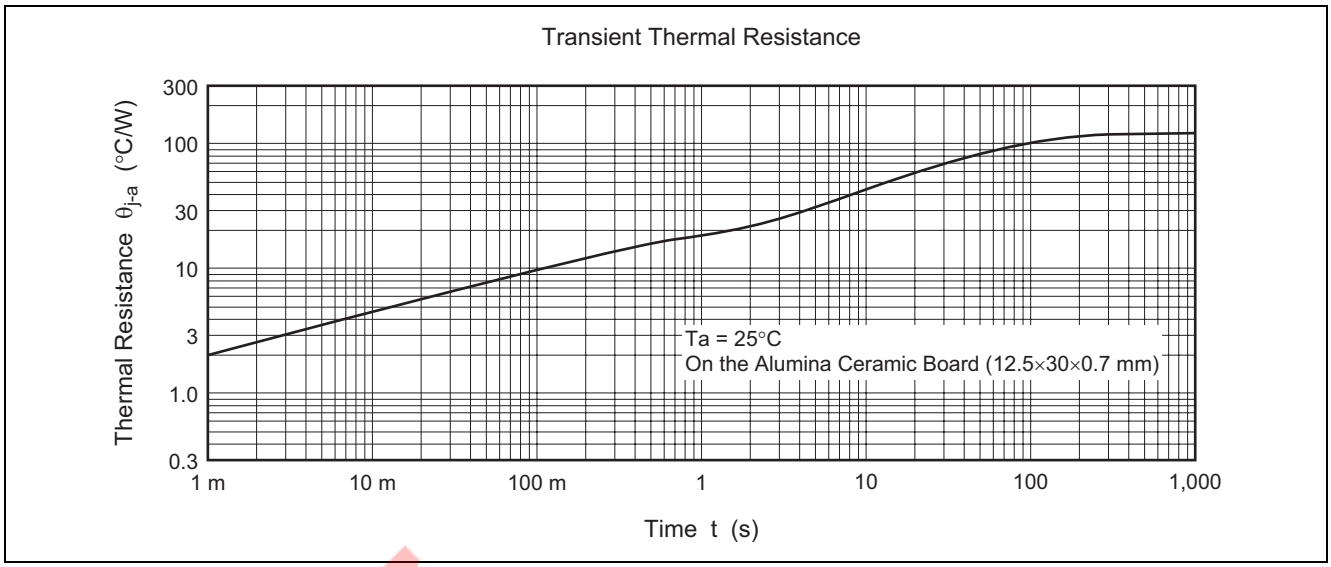


DC Current Transfer Ratio vs. Collector Current



Saturation Voltage vs. Collector Current

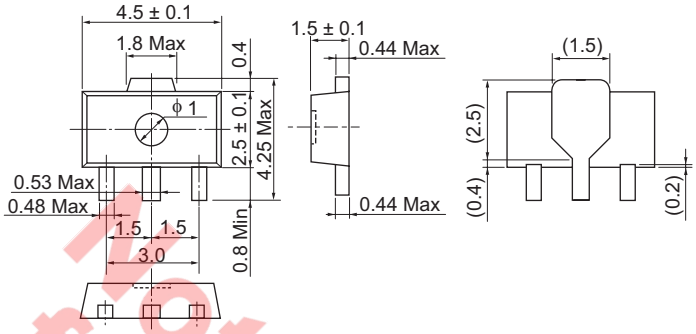




Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
UPAK	SC-62	PLZZ0004CA-A	UPAK / UPAKV	0.050g

Unit: mm



Ordering Information

Part Name	Quantity	Shipping Container
2SD1472CTTR-E	1000	φ 178 mm Reel, 12 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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RENESAS SALES OFFICES

http://www.renesas.com

Refer to "**http://www.renesas.com/en/network**" for the latest and detailed information.

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