2SA673, 2SA673A

Silicon PNP Epitaxial

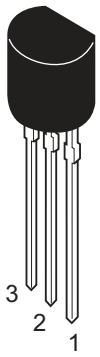
R07DS0429EJ0300
(Previous: REJ03G0626-0200)
Rev.3.00
Jun 07, 2011

Application

- Low frequency amplifier
- Complementary pair with 2SC1213 and 2SC1213A

Outline

RENESAS Package code: PRSS0003DA-A
(Package name: TO-92 (1))



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	2SA673	2SA673A	Unit
Collector to base voltage	V_{CBO}	–35	–50	V
Collector to emitter voltage	V_{CEO}	–35	–50	V
Emitter to base voltage	V_{EBO}	–4	–4	V
Collector current	I_C	–500	–500	mA
Collector power dissipation	P_C	400	400	mW
Junction temperature	Tj	150	150	°C
Storage temperature	Tstg	–55 to +150	–55 to +150	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	2SA673			2SA673A			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	$V_{(BR)CBO}$	–35	—	—	–50	—	—	V	I_C = –10 μA, I_E = 0
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	–35	—	—	–50	—	—	V	I_C = –1 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	–4	—	—	–4	—	—	V	I_E = –10 μA, I_C = 0
Collector cutoff current	I_{CBO}	—	—	–0.5	—	—	–0.5	μA	V_{CB} = –20 V, I_E = 0
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	–0.2	–0.6	—	–0.2	–0.6	V	I_C = –150 mA, I_B = –15 mA*[2]
DC current transfer ratio	h_{FE}*[1]	60	—	320	60	—	320		V_{CE} = –3 V, I_C = –10 mA
DC current transfer ratio	h_{FE}	10	—	—	10	—	—		V_{CE} = –3 V, I_C = –500 mA*[2]
Base to emitter voltage	V_{BE}	—	–0.64	—	—	–0.64	—	V	V_{CE} = –3 V, I_C =–10 mA

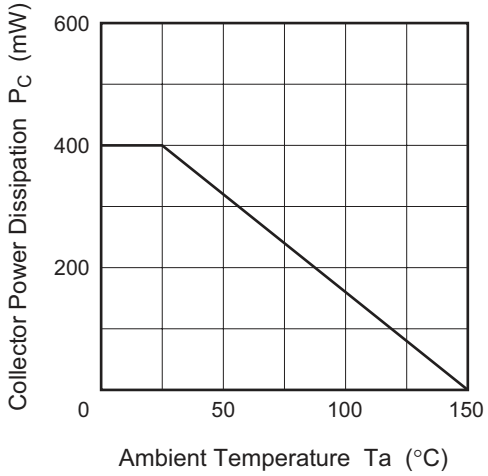
Notes: 1. The 2SA673 and 2SA673A are grouped by h_{FE} as follows.

2. Pulse test

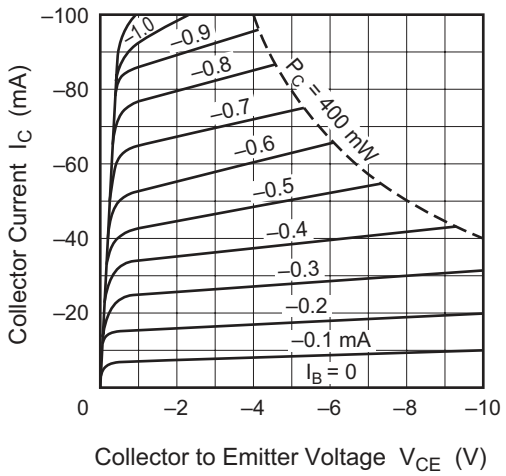
B	C	D
60 to 120	100 to 200	160 to 320

Main Characteristics

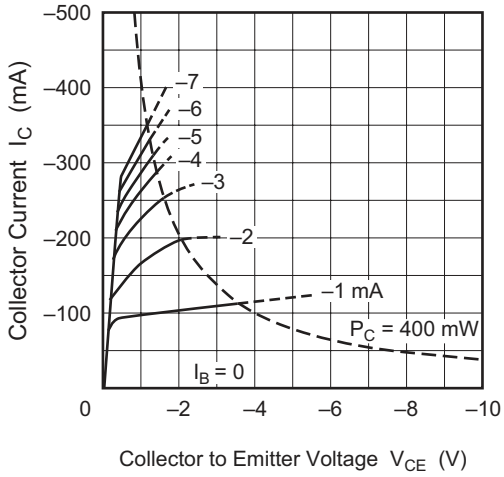
Maximum Collector Dissipation Curve



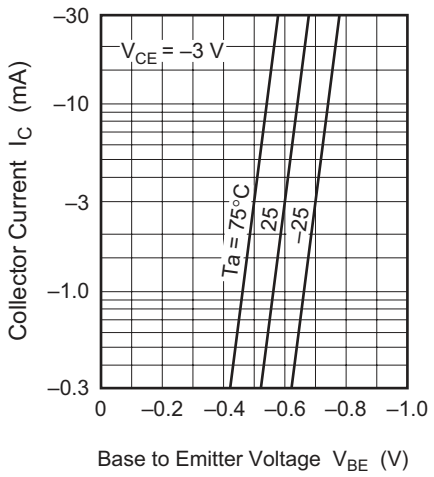
Typical Output Characteristics (1)



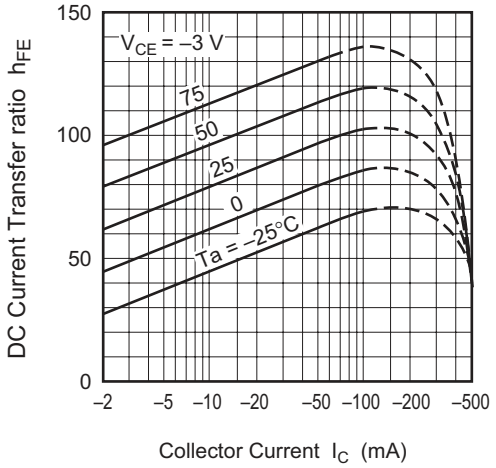
Typical Output Characteristics (2)



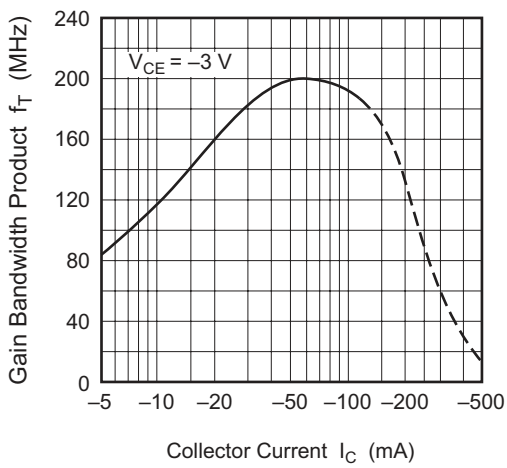
Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



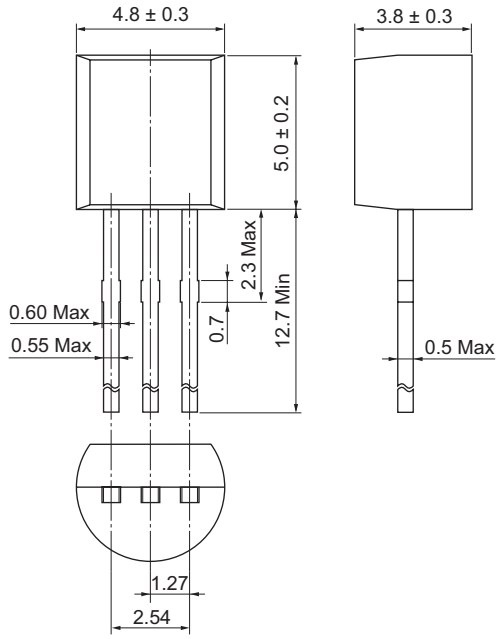
Gain Bandwidth Product vs. Collector Current



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
TO-92(1)	SC-43A	PRSS0003DA-A	TO-92(1) / TO-92(1)V	0.25g

Unit: mm



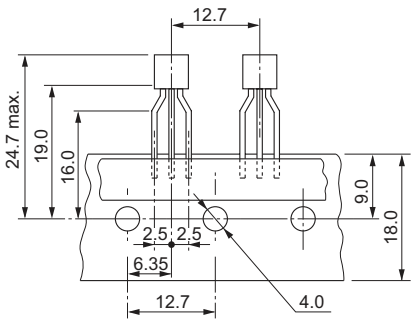
Ordering Information

Part Name	Quantity	Shipping Container
2SA673BTZ-E 2SA673CTZ-E 2SA673DTZ-E 2SA673ABTZ-E 2SA673ACTZ-E 2SA673ADTZ-E	2500	Hold Box, Radial Taping

Notes: 1. For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

2. Leads is forming applied as following figure.

Unit: mm



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