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2SA673, 2SA673A

Silicon PNP Epitaxial

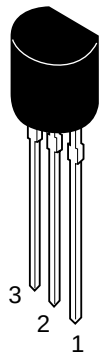
HITACHI

Application

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

Outline

TO-92 (1)



1. Emitter
2. Collector
3. Base

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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)

		2SA673			2SA673A				
Item	Symbol	Min	Typ	Max	Min	Typ	Max	Unit	Test conditions
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 trnsfer ratio	h_{FE}*[1]	60	—	320	60	—	320		V_{CE} = –3 V, I_C = –10 mA
DC current trnsfer 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

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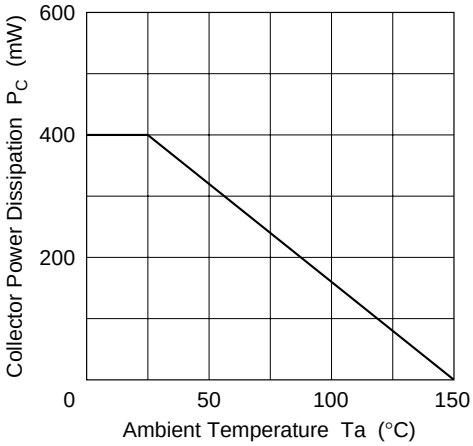
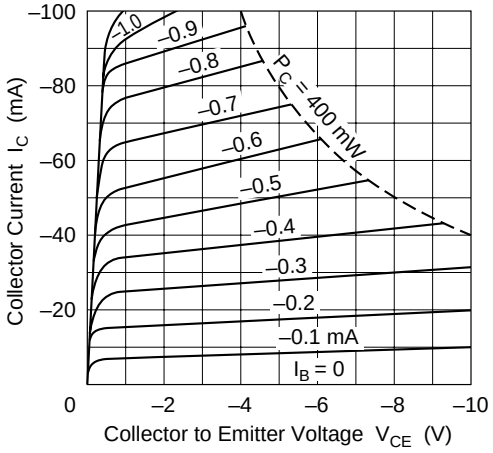
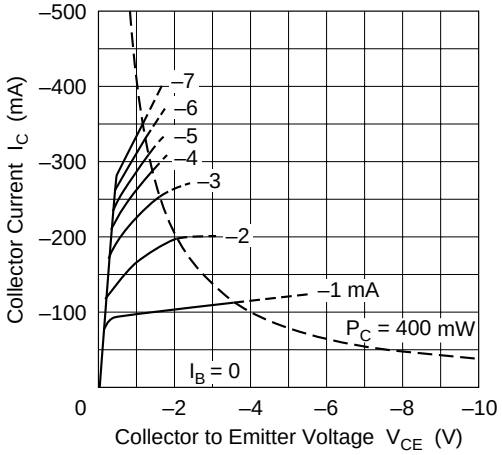
Maximum Collector Dissipation Curve



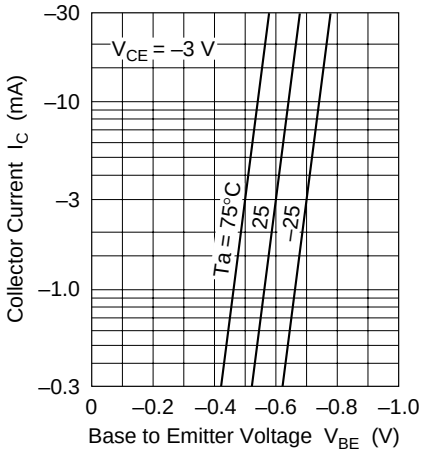
Typical Output Characteristics (1)



Typical Output Characteristics (2)



Typical Transfer Characteristics



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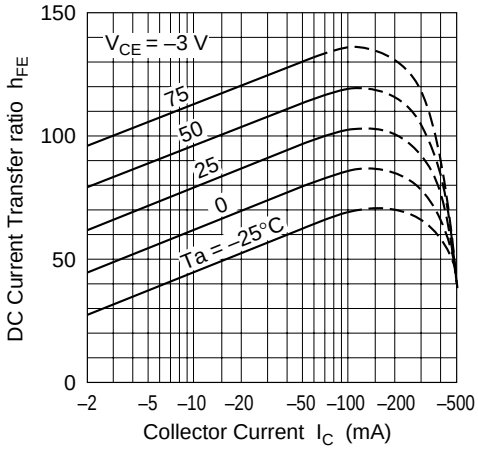
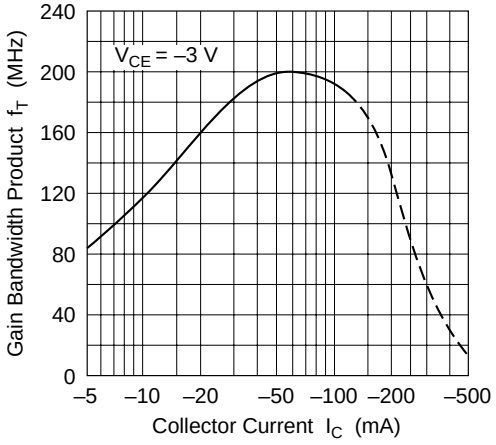
DC Current Transfer Ratio vs. Collector Current



Gain Bandwidth Product vs. Collector Current



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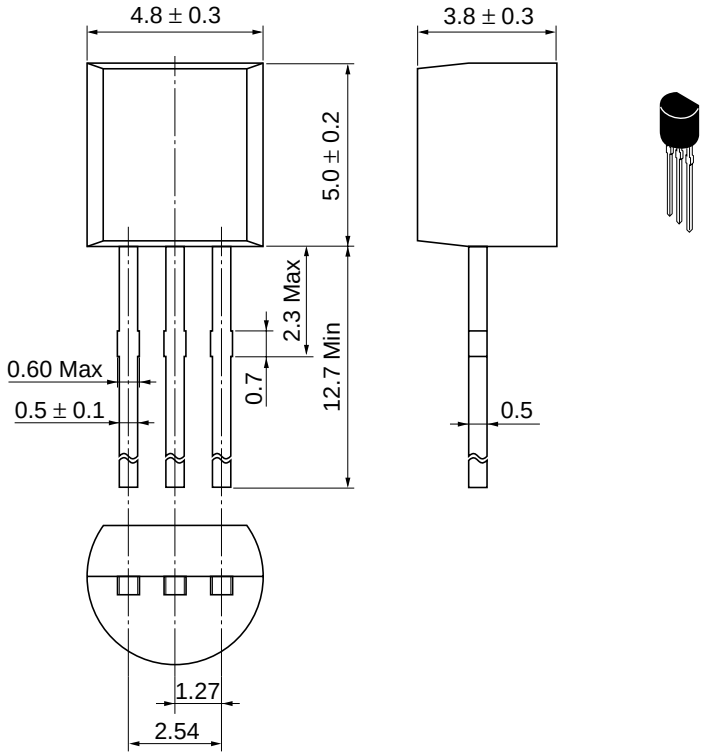
Unit: mm



Hitachi Code	TO-92 (1)
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.25 g

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