
2SA1121

Silicon PNP Epitaxial

HITACHI

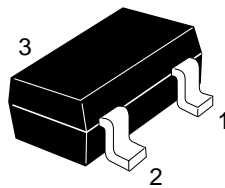
ADE-208-1008 (Z)
1st. Edition
Mar. 2001

Application

- Low frequency amplifier
- Complementary pair with 2SC2618

Outline

MPAK



1. Emitter
2. Base
3. Collector

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-35	V
Collector to emitter voltage	V_{CEO}	-35	V
Emitter to base voltage	V_{EBO}	-4	V
Collector current	I_{C}	-500	mA
Collector power dissipation	P_{C}	150	mW
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

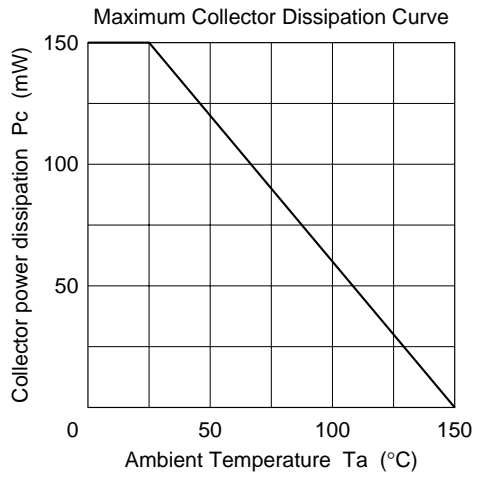
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	-35	—	—	V	$I_{\text{C}} = -10 \mu\text{A}$, $I_{\text{E}} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	-35	—	—	V	$I_{\text{C}} = -1 \text{ mA}$, $R_{\text{BE}} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	-4	—	—	V	$I_{\text{E}} = -10 \mu\text{A}$, $I_{\text{C}} = 0$
Collector cutoff current	I_{CBO}	—	—	-0.5	μA	$V_{\text{CB}} = -20 \text{ V}$, $I_{\text{E}} = 0$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	-0.2	-0.6	V	$I_{\text{C}} = -150 \text{ mA}$, $I_{\text{B}} = -15 \text{ mA}$
DC current transfer ratio	h_{FE}^{*1}	60	—	320		$V_{\text{CE}} = -3 \text{ V}$, $I_{\text{C}} = -10 \text{ mA}$
	h_{FE}	10	—	—		$V_{\text{CE}} = -3 \text{ V}$, $I_{\text{C}} = -500 \text{ mA}$ (Pulse test)
Base to emitter voltage	V_{BE}	—	-0.64	—	V	$V_{\text{CE}} = -3 \text{ V}$, $I_{\text{C}} = -10 \text{ mA}$

Note: 1. The 2SA1121 is grouped by h_{FE} as follows.

Grade	B	C	D
Mark	SB	SC	SD
h_{FE}	60 to 120	100 to 200	160 to 320

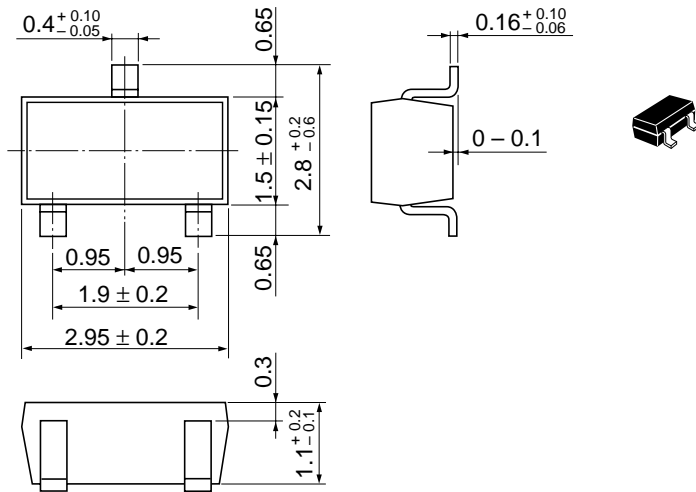
See characteristic curves of 2SA673.



Package Dimensions

As of January, 2001

Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.011 g

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