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# 2SA1122

Silicon PNP Epitaxial

# HITACHI

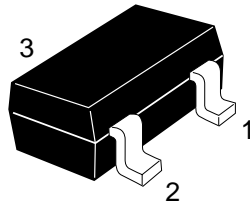
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## Application

Low frequency amplifier

## 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	$V_{\text{CBO}}$	-55	V
Collector to emitter voltage	$V_{\text{CEO}}$	-55	V
Emitter to base voltage	$V_{\text{EBO}}$	-5	V
Collector current	$I_{\text{C}}$	-100	mA
Collector power dissipation	$P_{\text{C}}$	150	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

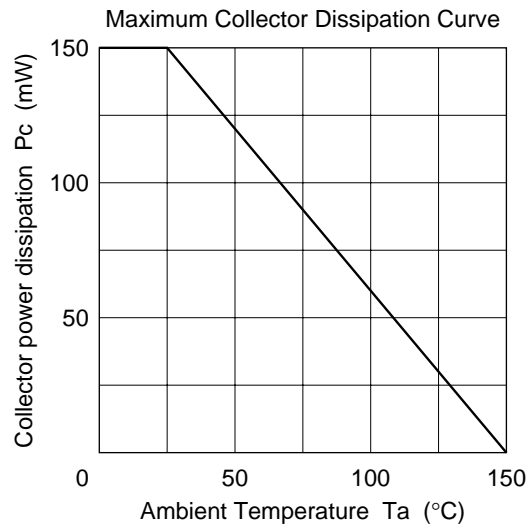
**Electrical Characteristics** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	-55	—	—	V	$I_{\text{C}} = -10 \mu\text{A}, I_{\text{E}} = 0$
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	-55	—	—	V	$I_{\text{C}} = -1 \text{ mA}, R_{\text{BE}} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	-5	—	—	V	$I_{\text{E}} = -10 \mu\text{A}, I_{\text{C}} = 0$
Collector cutoff current	$I_{\text{CBO}}$	—	—	-0.5	$\mu\text{A}$	$V_{\text{CB}} = -30 \text{ V}, I_{\text{E}} = 0$
Emitter cutoff current	$I_{\text{EBO}}$	—	—	-0.5	$\mu\text{A}$	$V_{\text{EB}} = -2 \text{ V}, I_{\text{C}} = 0$
DC current transfer ratio	$h_{\text{FE}}^{*1}$	160	—	800		$V_{\text{CE}} = -12 \text{ V}, I_{\text{C}} = -2 \text{ mA}$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	-0.5	V	$I_{\text{C}} = -10 \text{ mA}, I_{\text{B}} = -1 \text{ mA}$
Base to emitter voltage	$V_{\text{BE}}$	—	—	-0.75	V	$V_{\text{CE}} = -12 \text{ V}, I_{\text{C}} = -2 \text{ mA}$

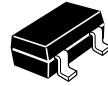
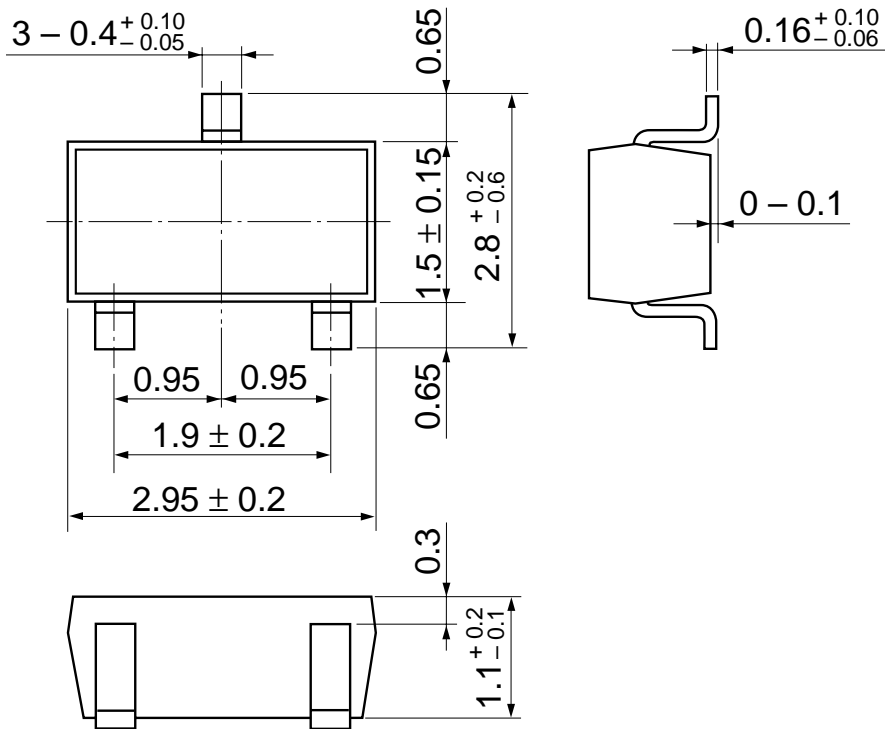
Note: 1. The 2SA1122 is grouped by  $h_{\text{FE}}$  as follows.

Grade	B	C	D
Mark	CC	CD	CE
$h_{\text{FE}}$	160 to 320	250 to 500	400 to 800

See characteristic curves of 2SA836.



Unit: mm



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

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