
2SA1052

Silicon PNP Epitaxial

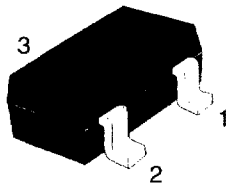
HITACHI

Application

Low frequency amplifier

Outline

MPAK



- 1. Emitter
- 2. Base
- 3. Collector

2SA1052

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-30	V
Collector to emitter voltage	V_{CEO}	-30	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Emitter current	I_E	100	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-30	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-30	—	—	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-0.5	μA	$V_{CB} = -20 \text{ V}, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-0.5	μA	$V_{EB} = -2 \text{ V}, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	100	—	500		$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.2	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$
Base to emitter voltage	V_{BE}	—	—	-0.75	V	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$

Note: 1. The 2SA1052 is grouped by h_{FE} as follows.

Grade	B	C	D
Mark	MB	MC	MD
h_{FE}	100 to 200	160 to 320	250 to 500

See characteristic curves of 2SA1031.

