
2SA1374

Silicon PNP Epitaxial

HITACHI

ADE-208-1016 (Z)
1st. Edition
Mar. 2001

Application

Low frequency amplifier

Outline

SPAK



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

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	−55	V
Collector to emitter voltage	V_{CEO}	−55	V
Emitter to base voltage	V_{EBO}	−5	V
Collector current	I_C	−100	mA
Base current	I_B	−30	mA
Collector power dissipation	P_C	300	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

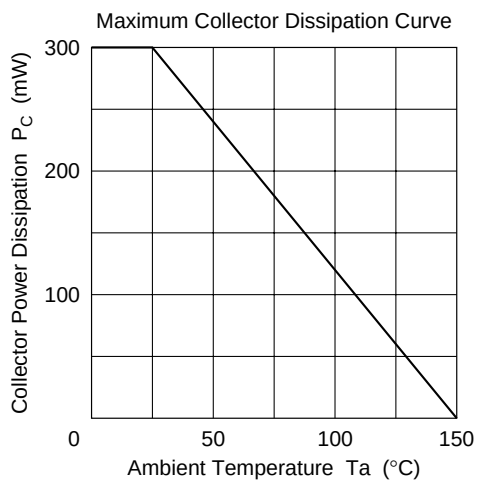
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	−55	—	—	V	$I_C = -10\text{ }\mu\text{A}$, $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	−55	—	—	V	$I_C = -1\text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	−5	—	—	V	$I_E = -10\text{ }\mu\text{A}$, $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	−0.1	μA	$V_{CB} = -18\text{ V}$, $I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	−0.05	μA	$V_{EB} = -2\text{ V}$, $I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	160	—	500		$V_{CE} = -12\text{ V}$, $I_C = -2\text{ mA}$
Base to emitter voltage	V_{BE}	—	−0.66	−0.75	V	$V_{CE} = -12\text{ V}$, $I_C = -2\text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	−0.1	−0.5	V	$I_C = -10\text{ mA}$, $I_B = -1\text{ mA}$
Gain bandwidth product	f_T	—	250	—	MHz	$V_{CE} = -12\text{ V}$, $I_C = -2\text{ mA}$
Collector output capacitance	C_{ob}	—	2.5	—	pF	$V_{CB} = -10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$

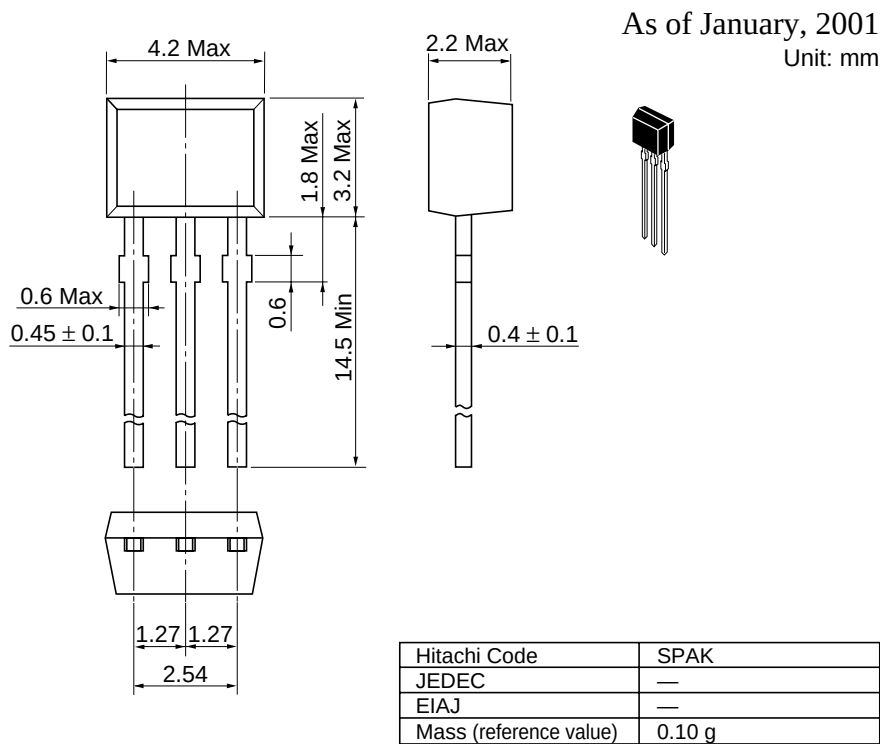
Note: 1. The 2SA1374 is grouped by h_{FE} as follows.

C	D
160 to 320	250 to 500

See characteristic curves of 2SA836.



Package Dimensions



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