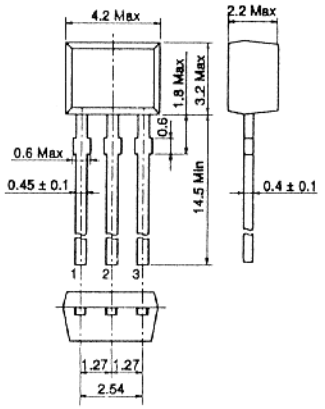
HITACHI

2SA1374

SILICON PNP EPITAXIAL

LOW FREQUENCY AMPLIFIER



(SPAK)

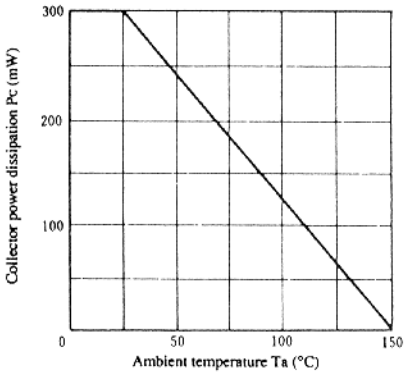
1. Emitter
2. Collector
3. Base

(Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SA1374	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

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = –10μA, I_E = 0	–55	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = –1mA, R_{BE} = ∞	–55	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = –10μA, I_C = 0	–5	—	—	V
Collector cutoff current	I_{CBO}	V_{CB} = –18V, I_E = 0	—	—	–0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = –2V, I_C = 0	—	—	–0.05	μA
DC current transfer ratio	h_{FE}*	V_{CE} = –12V, I_C = –2mA	160	—	500	
Base to emitter voltage	V_{BE}	V_{CE} = –12V, I_C = –2mA	—	–0.66	–0.75	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –10mA, I_B = –1mA	—	–0.1	–0.5	V
Gain bandwidth product	f_T	V_{CE} = –12V, I_C = –2mA	—	250	—	MHz
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz	—	2.5	—	pF

* The 2SA1374 is grouped by h_{FE} as follows.

C	D
160 to 320	250 to 500

■ See characteristic curves of 2SA836.