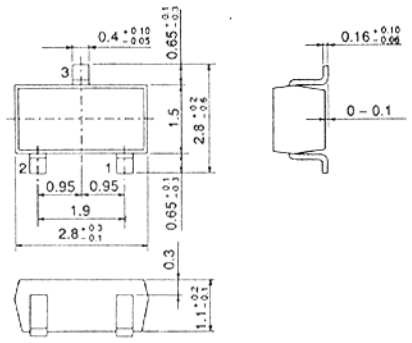
HITACHI

2SA1052

SILICON PNP EPITAXIAL

LOW FREQUENCY AMPLIFIER



1. Emitter
2. Base
3. Collector

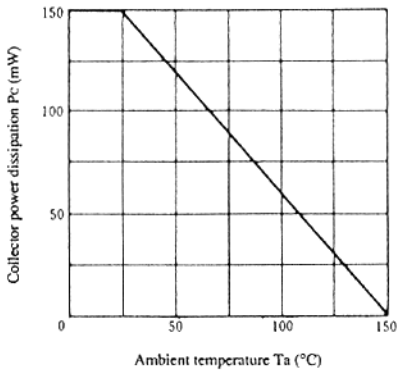
(Dimensions in mm)

(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SA1052	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

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	–30	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = –1mA, R_{BE} = ∞	–30	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = –10μA, I_C = 0	–5	—	—	V
Collector cutoff current	I_{CBO}	V_{CB} = –20V, I_E = 0	—	—	–0.5	μA
Emitter cutoff current	I_{EBO}	V_{EB} = –2V, I_C = 0	—	—	–0.5	μA
DC current transfer ratio	h_{FE}*	V_{CE} = –12V, I_C = –2mA	100	—	500	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –10mA, I_B = –1mA	—	—	–0.2	V
Base to emitter voltage	V_{BE}	V_{CE} = –12V, I_C = –2mA	—	—	–0.75	V

* 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.