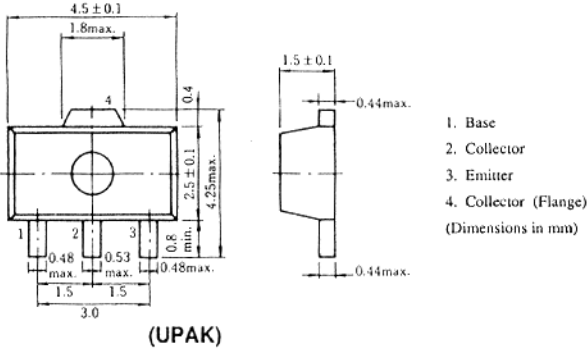


2SB1000

SILICON PNP EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER

Complementary pair with 2SD1366



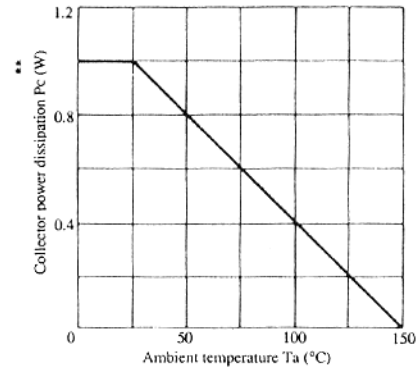
■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1000	Unit
Collector to base voltage	V _{CB0}	-25	V
Collector to emitter voltage	V _{CE0}	-20	V
Emitter to base voltage	V _{EB0}	-5	V
Collector current	I _C	-1	A
Collector peak current	i _{C(peak)} *	-1.5	A
Collector power dissipation	P _C **	1	W
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10ms, Duty cycle ≤ 20%

** Value on the alumina ceramic board (12.5 × 20 × 0.7mm)

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	-25	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-20	—	—	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	—	—	-0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -4V, I _C = 0	—	—	-0.1	μA
DC current transfer ratio	h _{FE} *	V _{CE} = -2V, I _C = -0.5A, (Pulse test)	85	—	240	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -0.8A, I _B = -0.08A, (Pulse test)	—	-0.2	-0.3	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = -0.8A, I _B = -0.08A, (Pulse test)	—	-0.94	-1.1	V
Gain bandwidth product	f _T	V _{CE} = -2V, I _C = -0.5A, (Pulse test)	—	200	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	38	—	pF

* The 2SB1000 is grouped by h_{FE} as follows.

Mark	AH	AJ
h _{FE}	85 to 170	120 to 240

■ See characteristic curves of 2SB562.