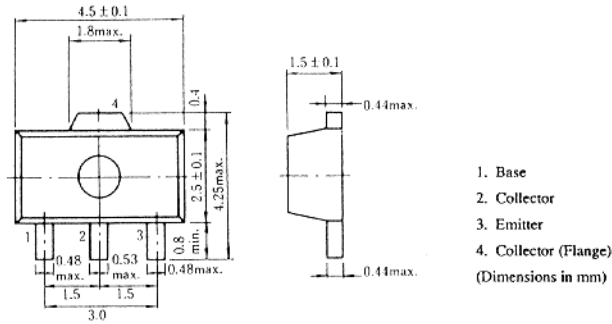
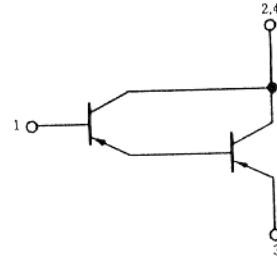


2SB1048

SILICON PNP EPITAXIAL
HIGH GAIN AMPLIFIER



1. Base
 2. Collector
 3. Emitter
 4. Collector (Flange)
- (Dimensions in mm)



(UPAK)

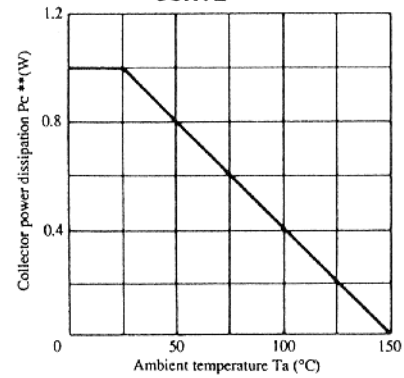
■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1048	Unit
Collector to base voltage	V _{CB0}	-60	V
Collector to emitter voltage	V _{CE0}	-60	V
Emitter to base voltage	V _{EB0}	-7	V
Collector current	I _C	-1	A
Collector peak current	i _{C(peak)*}	-2	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 × 30 × 0.7mm)

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

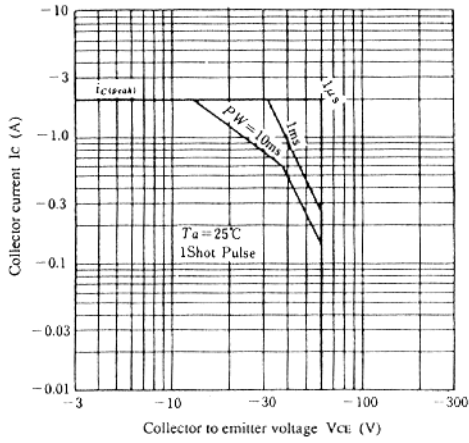
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-60	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-60	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = -60V, I _E = 0	—	—	-10	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -7V, I _E = 0	—	—	-10	μA
DC current transfer ratio	h _{FE}	V _{CE} = -3V, I _C = -500mA*	2000	—	100000	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -500mA, I _B = -1mA*	—	—	-2.0	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = -500mA, I _B = -1mA*	—	—	-2.0	V

* Pulse Test

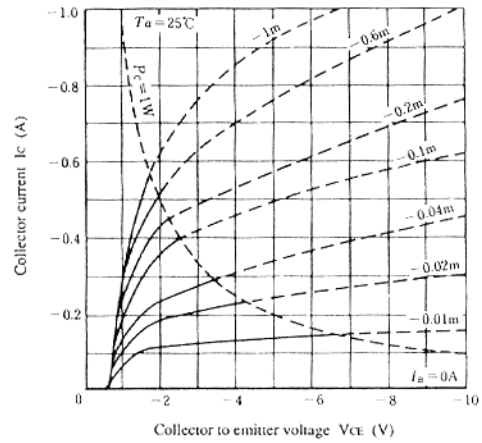
** Marking is "BT"

2SB1048

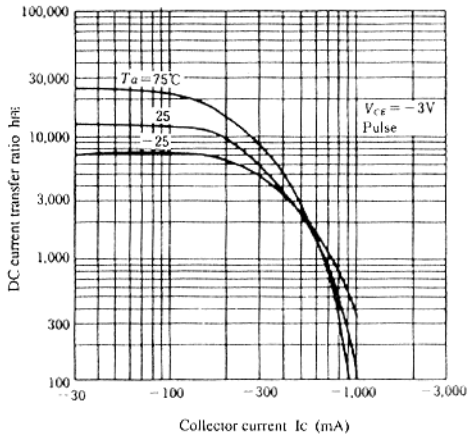
AREA OF SAFE OPERATION



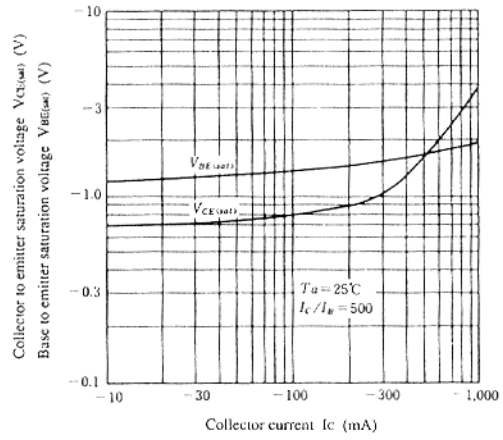
TYPICAL OUTPUT CHARACTERISTICS



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT



TRANSIENT THERMAL RESISTANCE

