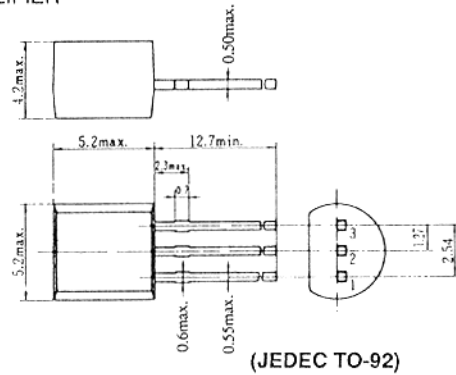


2SB637 (K)

SILICON PNP EPITAXIAL
LOW FREQUENCY AMPLIFIER

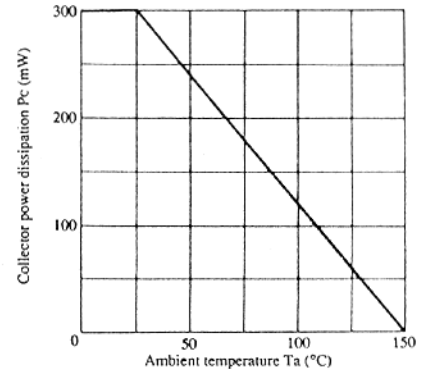


1. Emitter
 2. Collector
 3. Base
- (Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB637 (K)	Unit
Collector to base voltage	V _{CB0}	-50	V
Collector to emitter voltage	V _{CEO}	-50	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	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)

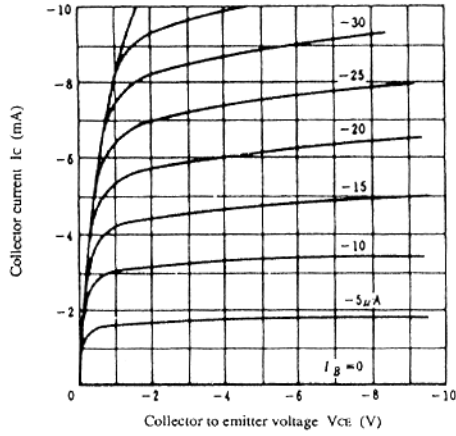
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-50	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-50	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0	-5	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = -18V, I _E = 0	—	—	-100	nA
DC current transfer ratio	h _{FE} *	V _{CE} = -12V, I _C = -2mA	160	—	800	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -10mA, I _B = -1mA	—	-0.1	-0.5	V
Base to emitter voltage	V _{BE}	V _{CE} = -12V, I _C = -2mA	—	-0.66	-0.75	V
Gain bandwidth product	f _T	V _{CE} = -12V, I _E = 2mA	—	200	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	1.8	—	pF

* The 2SB637 (K) is grouped by h_{FE} as follows.

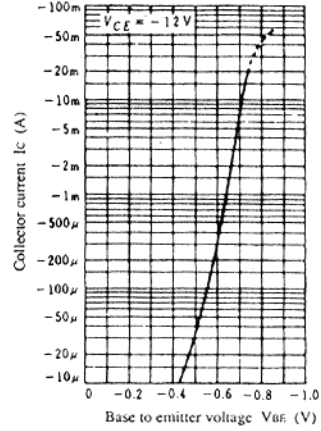
C	D	E
160 to 320	250 to 500	400 to 800

2SB637(K)

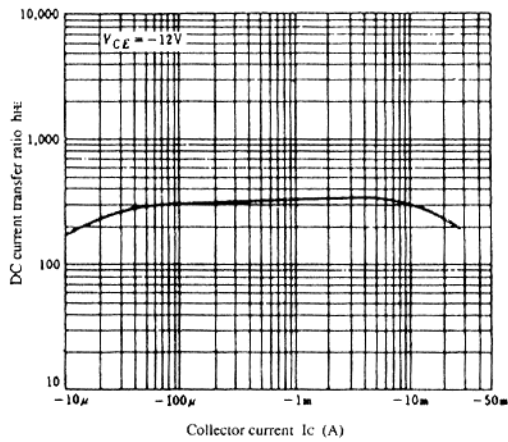
TYPICAL OUTPUT CHARACTERISTICS



TYPICAL TRANSFER CHARACTERISTICS



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE

