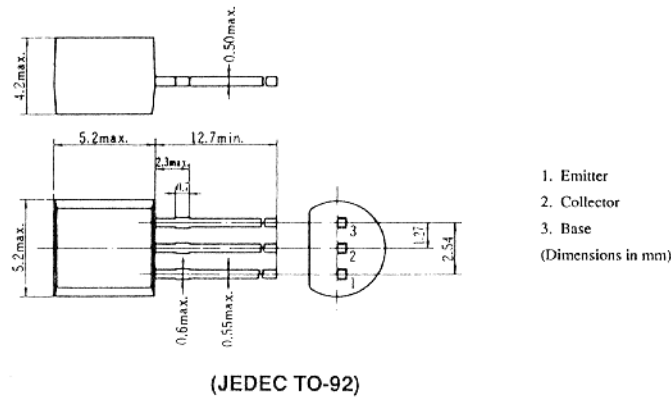


2SB1348, 2SB1349

SILICON PNP EPITAXIAL

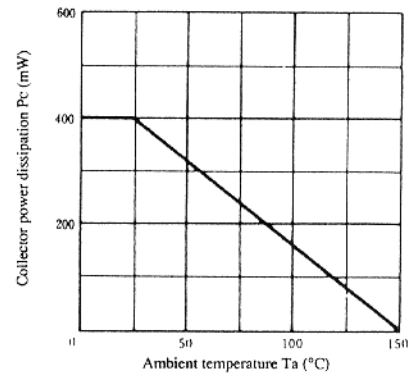
LOW FREQUENCY HIGH VOLTAGE AMPLIFIER



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1348	2SB1349	Unit
Collector to base voltage	V _{CB0}	-160	-200	V
Collector to emitter voltage	V _{CEO}	-160	-200	V
Emitter to base voltage	V _{EBO}	-5	-5	V
Collector current	I _C	-100	-100	mA
Collector power dissipation	P _C	400	400	mW
Junction temperature	T _J	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

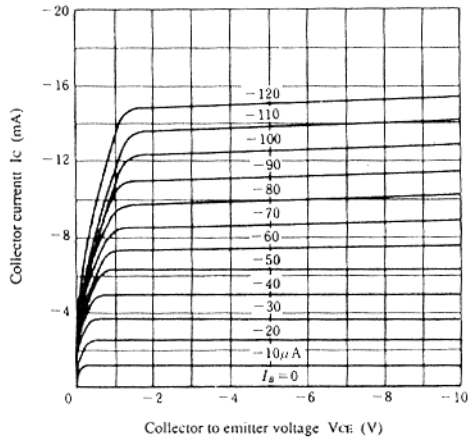
Item	Symbol	Test Condition		min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	2SB1348	-160	—	—	V
			2SB1349	-200	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	2SB1348	-160	—	—	V
			2SB1349	-200	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0		-5	—	—	V
Collector cutoff current	I _{CB0}	2SB1348	V _{CB} = -140V, I _E = 0	—	—	-10	μA
		2SB1349	V _{CB} = -160V, I _E = 0	—	—	-10	μA
DC current transfer ratio	h _{FE1} *	V _{CE} = -5V, I _C = -10mA		60	—	200	
	h _{FE2}	V _{CE} = -5V, I _C = -1mA		30	—	—	
Base to emitter voltage	V _{BE}	V _{CE} = -5V, I _C = -10mA		—	—	-1.5	V
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -30mA, I _B = -3mA		—	—	-0.5	V
Gain bandwidth product	f _T	V _{CE} = -5V, I _C = -10mA		—	140	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz		—	5.5	—	pF

* The 2SB1348 and 2SB1349 are grouped by h_{FE1} as follows.

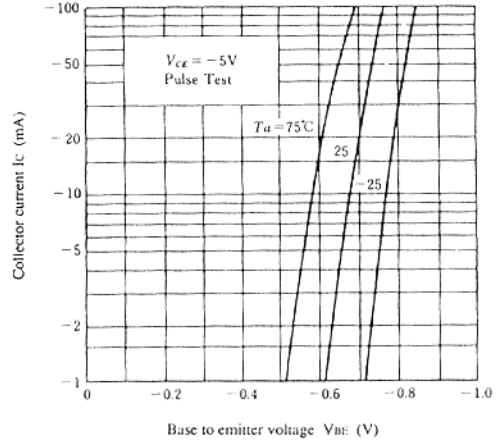
Grade	B	C
h _{FE1}	60 to 120	100 to 200

2SB1348, 2SB1349

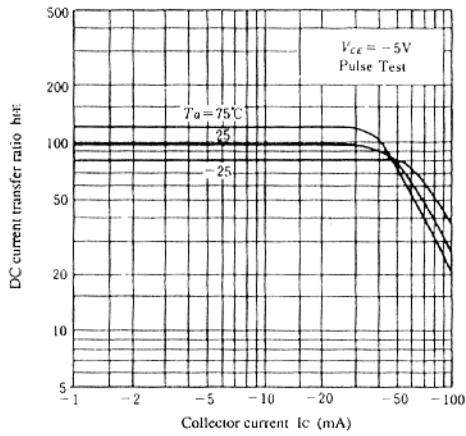
TYPICAL OUTPUT CHARACTERISTICS



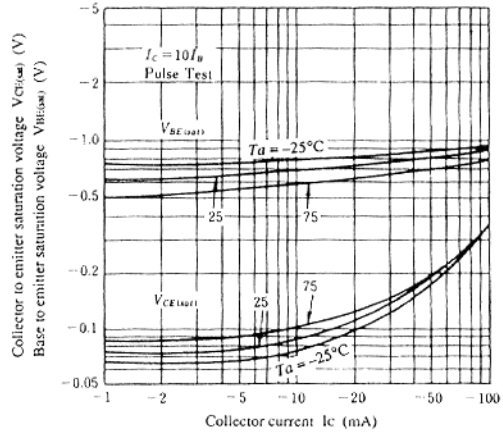
TYPICAL TRANSFER CHARACTERISTICS



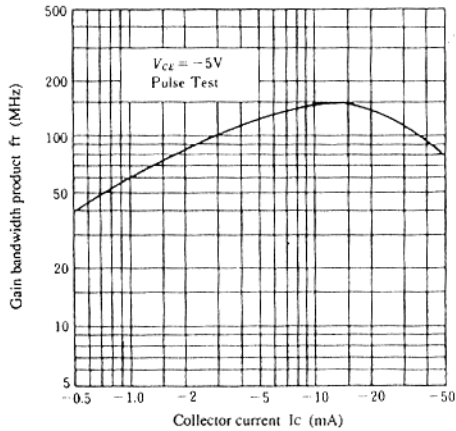
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE

