

2SA1034, 2SA1035

Silicon PNP epitaxial planer type

For low-frequency and low-noise amplification

Complementary to 2SC2405 and 2SC2406

Features

- Low noise voltage NV.
- High forward current transfer ratio h_{FE} .
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	2SA1034 -35	V
2SA1035		-55	
Collector to emitter voltage	V _{CEO}	2SA1034 -35	V
2SA1035		-55	
Emitter to base voltage	V _{EBO}	-5	V
Peak collector current	I _{CP}	-100	mA
Collector current	I _C	-50	mA
Collector power dissipation	P _C	200	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

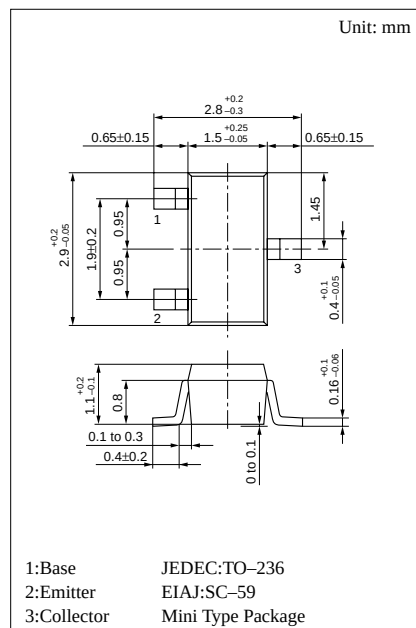
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = -10V, I _E = 0			-100	nA
	I _{CEO}	V _{CE} = -10V, I _B = 0			-1	μA
Collector to base voltage	V _{CBO}	I _C = -10μA, I _E = 0	2SA1034 -35			V
			2SA1035 -55			
Collector to emitter voltage	V _{CEO}	I _C = -2mA, I _B = 0	2SA1034 -35			V
			2SA1035 -55			
Emitter to base voltage	V _{EBO}	I _E = -10μA, I _C = 0	-5			V
Forward current transfer ratio	h _{FE} ^{*1}	V _{CE} = -5V, I _C = -2mA	180		700	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -100mA, I _B = -10mA ^{*2}		-0.7	-0.6	V
Base to emitter voltage	V _{BE}	V _{CE} = -1V, I _C = -100mA ^{*2}		200	-1.0	V
Transition frequency	f _T	V _{CB} = -5V, I _E = 2mA, f = 200MHz				MHz
Noise voltage	NV	V _{CE} = -10V, I _C = -1mA, G _v = 80dB R _g = 100kΩ, Function = FLAT			150	mV

^{*1}h_{FE1} Rank classification

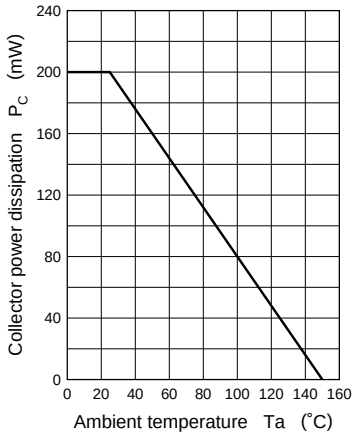
^{*2} Pulse measurement

Rank	R	S	T
h _{FE}	180 ~ 360	260 ~ 520	360 ~ 700
Marking Symbol	2SA1034 FR	2SA1035 FS	FT
	HR	HS	HT

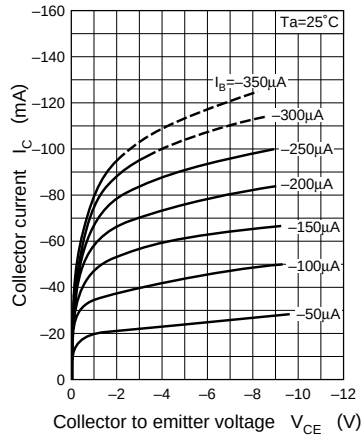


Marking symbol : F(2SA1034)
H(2SA1035)

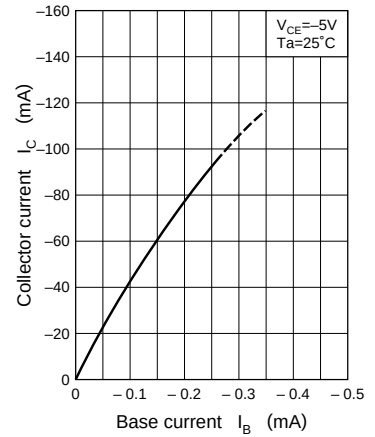
$P_C - T_a$



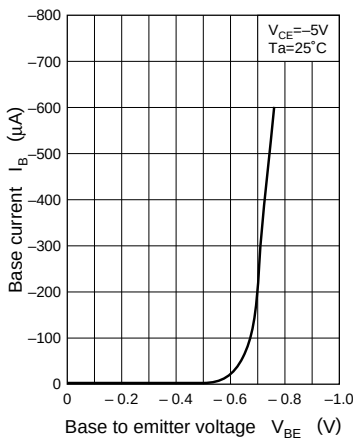
$I_C - V_{CE}$



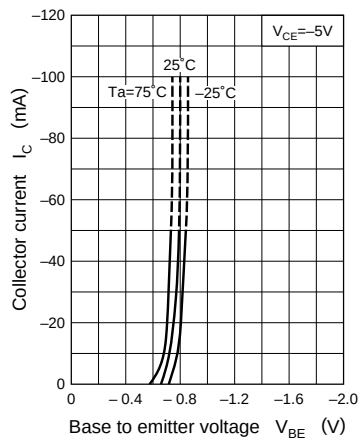
$I_C - I_B$



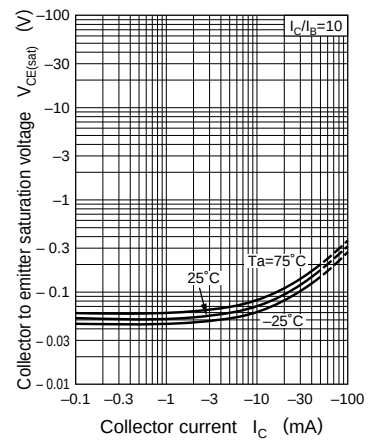
$I_B - V_{BE}$



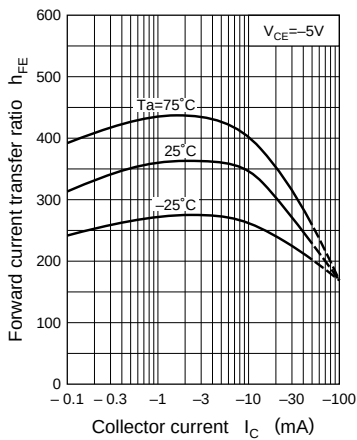
$I_C - V_{BE}$



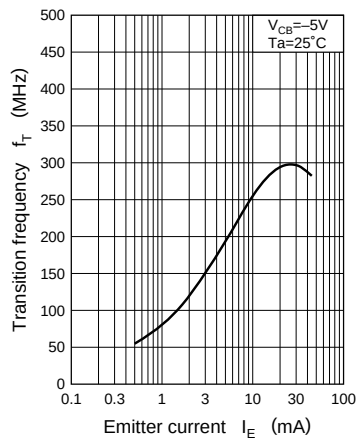
$V_{CE(sat)} - I_C$



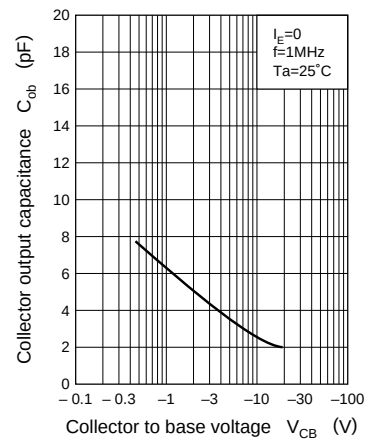
$h_{FE} - I_C$

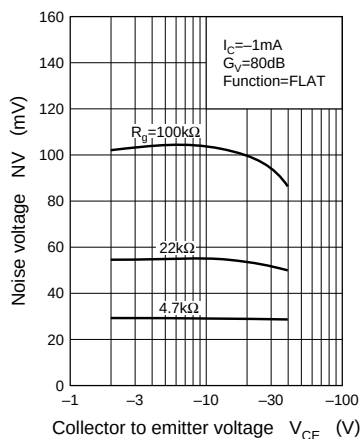
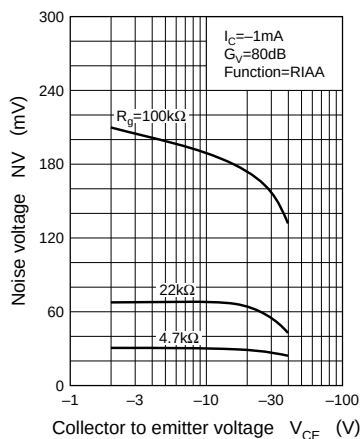
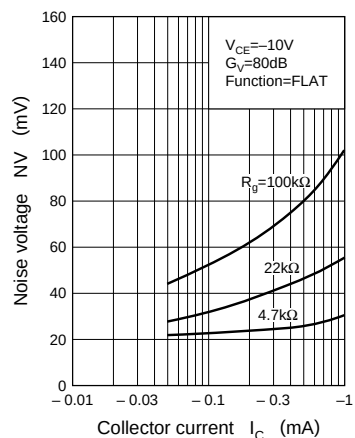
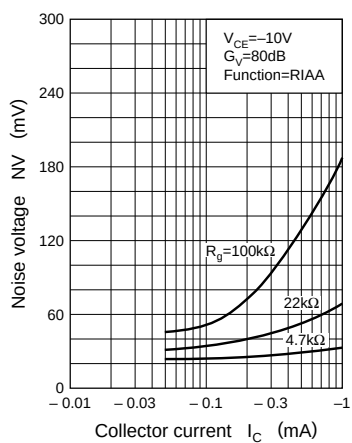
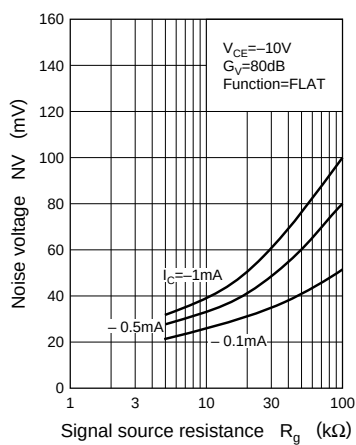


$f_T - I_E$



$C_{ob} - V_{CB}$



NV — V_{CE} NV — V_{CE} NV — I_C NV — I_C NV — R_g NV — R_g 