

2SA1034, 2SA1035

Silicon PNP epitaxial planar type

For low-frequency and low-noise amplification

Complementary to 2SC2405, 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 $T_a = 25^\circ\text{C}$

Parameter		Symbol	Rating	Unit
Collector-base voltage (Emitter open)	2SA1034	V_{CBO}	−35	V
	2SA1035		−55	
Collector-emitter voltage (Base open)	2SA1034	V_{CEO}	−35	V
	2SA1035		−55	
Emitter-base voltage (Collector open)		V_{EBO}	−5	V
Collector current		I_C	−50	mA
Peak collector current		I_{CP}	−100	mA
Collector power dissipation		P_C	200	mW
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

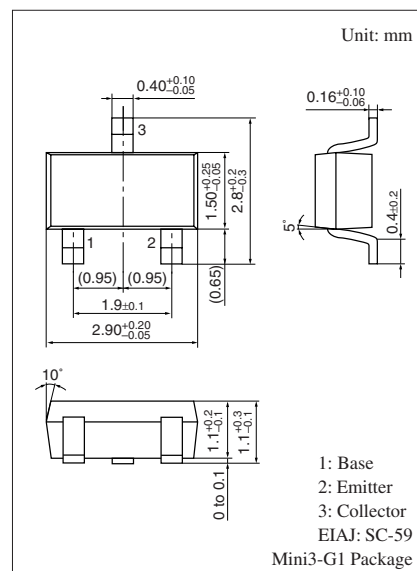
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	2SA1034 2SA1035	V_{CBO}	$I_C = -10\ \mu\text{A}, I_E = 0$	-35		V
				-55		
Collector-emitter voltage (Base open)	2SA1034 2SA1035	V_{CEO}	$I_C = -2\ \text{mA}, I_B = 0$	-35		V
				-55		
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10\ \mu\text{A}, I_C = 0$	-5			V
Base-emitter voltage *1	V_{BE}	$V_{CE} = -1\ \text{V}, I_C = -100\ \text{mA}$		-0.7	-1.0	V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -10\ \text{V}, I_E = 0$			-0.1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = -10\ \text{V}, I_B = 0$			-1	μA
Forward current transfer ratio *2	h_{FE}	$V_{CE} = -5\ \text{V}, I_C = -2\ \text{mA}$	180		700	—
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -100\ \text{mA}, I_B = -10\ \text{mA}$			-0.6	V
Transition frequency	f_T	$V_{CB} = -5\ \text{V}, I_E = 2\ \text{mA}, f = 200\ \text{MHz}$		200		MHz
Noise voltage	NV	$V_{CE} = -10\ \text{V}, I_C = -1\ \text{mA}, G_V = 80\ \text{dB}$ $R_g = 100\ \text{k}\Omega, \text{Function} = \text{FLAT}$			150	mV

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *1: Pulse measurement

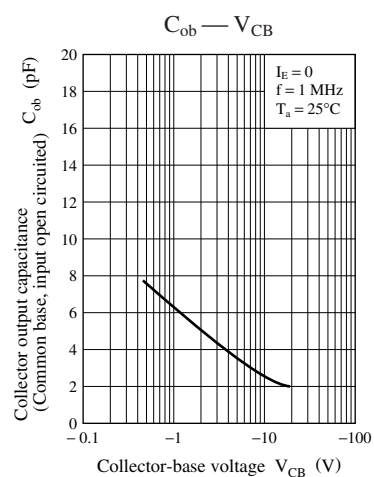
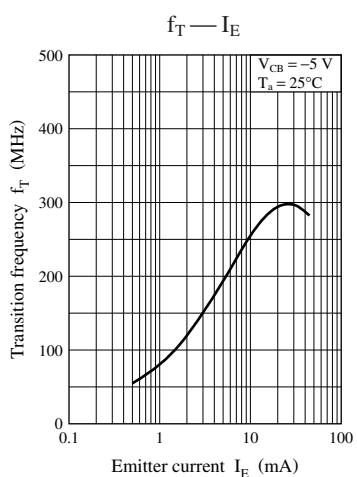
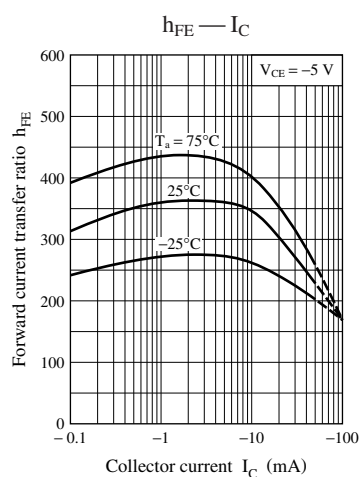
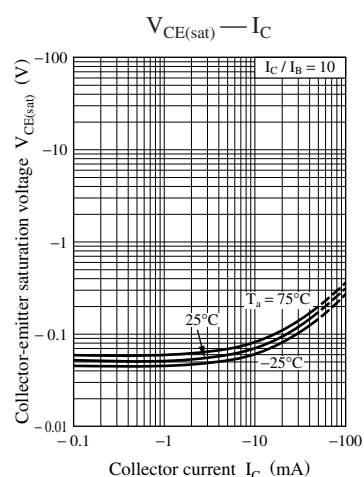
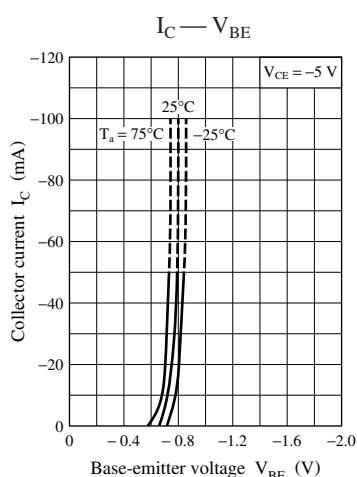
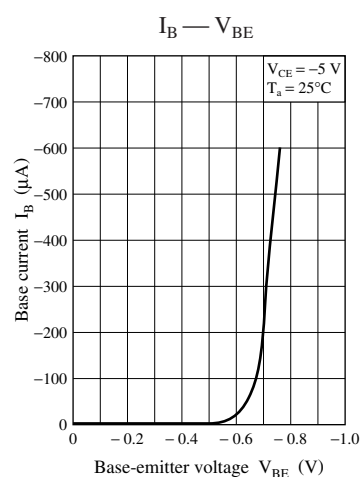
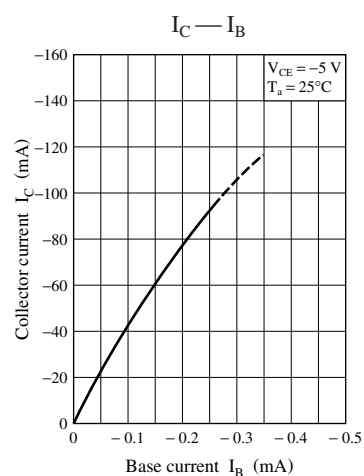
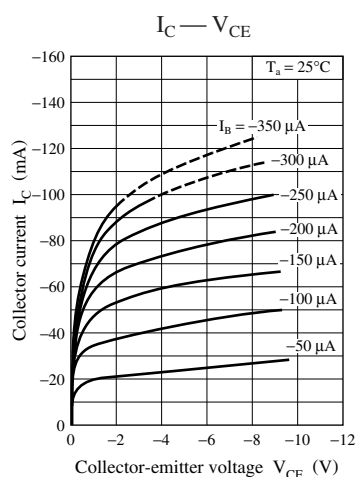
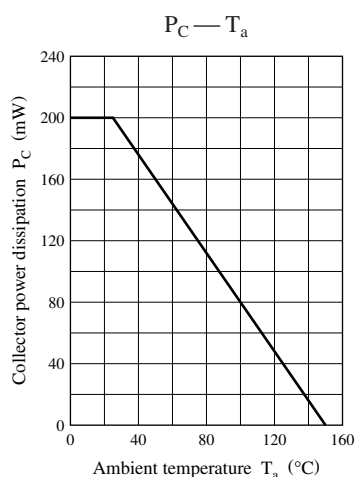
*2: Rank classification

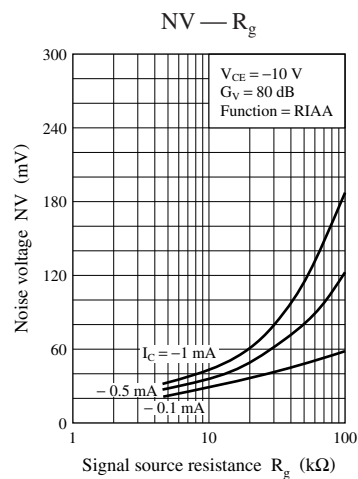
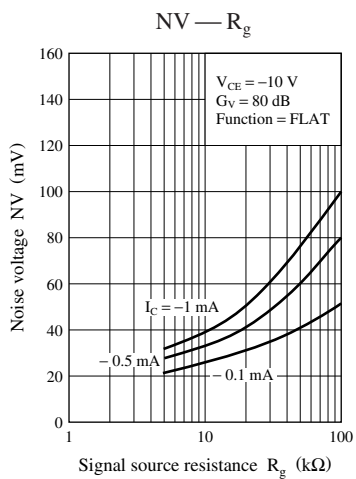
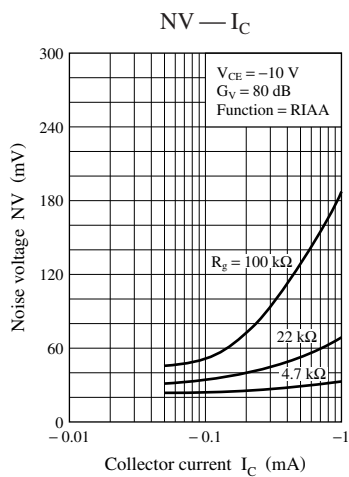
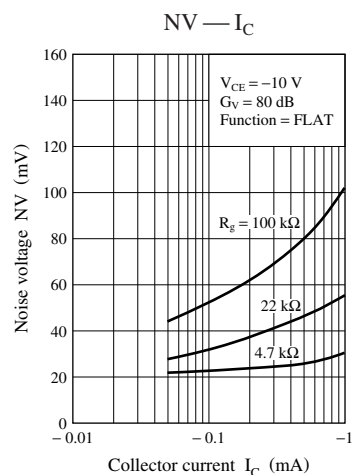
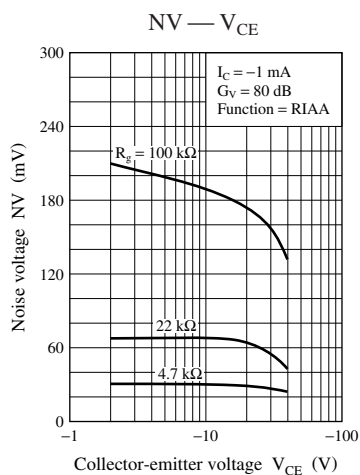
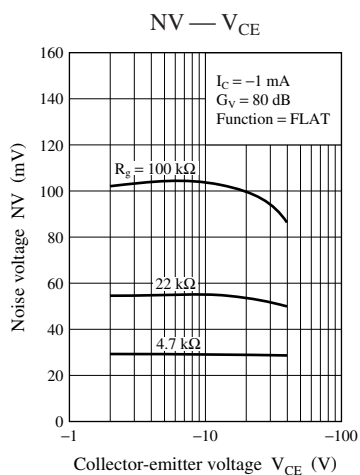
Rank	R	S	T
h_{FE}	180 to 360	260 to 520	360 to 700



Marking Symbol:

- 2SA1034: F
- 2SA1035: H





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