

2SA1619, 2SA1619A

Silicon PNP epitaxial planar type

For low-frequency power amplification and driver amplification
Complementary to 2SC4208 and 2SC4208A

■ Features

- Allowing supply with the radial tapering and automatic insertion possible

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	2SA1619	V_{CBO}	-30	V
	2SA1619A		-60	
Collector-emitter voltage (Base open)	2SA1619	V_{CEO}	-25	V
	2SA1619A		-50	
Emitter-base voltage (Collector open)	V_{EBO}	-5	V	
Collector current	I_C	-0.5	A	
Peak collector current	I_{CP}	-1	A	
Collector power dissipation	P_C	1	W	
Junction temperature	T_j	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

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

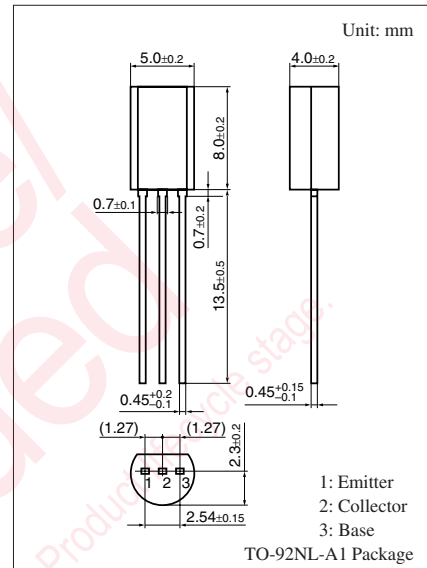
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	2SA1619	V_{CBO}	$I_C = -10 \mu\text{A}$, $I_E = 0$	-30		V
	2SA1619A			-60		
Collector-emitter voltage (Base open)	2SA1619	V_{CEO}	$I_C = -10 \text{mA}$, $I_B = 0$	-25		V
	2SA1619A			-50		
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20 \text{V}$, $I_E = 0$			-0.1	μA
Forward current transfer ratio *1	h_{FE1} *2	$V_{CE} = -10 \text{V}$, $I_C = -150 \text{mA}$	85	160	340	—
	h_{FE2}	$V_{CE} = -10 \text{V}$, $I_C = -500 \text{mA}$	40	90		
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -300 \text{mA}$, $I_B = -30 \text{mA}$		-0.35	-0.60	V
Base-emitter saturation voltage *1	$V_{BE(sat)}$	$I_C = -300 \text{mA}$, $I_B = -30 \text{mA}$		-1.1	-1.5	V
Transition frequency	f_T	$V_{CB} = -10 \text{V}$, $I_E = 50 \text{mA}$, $f = 200 \text{MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10 \text{V}$, $I_E = 0$, $f = 1 \text{MHz}$		6	15	pF

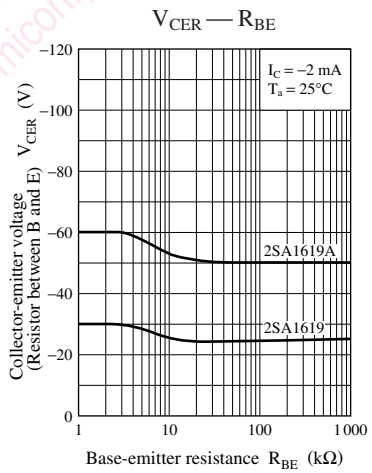
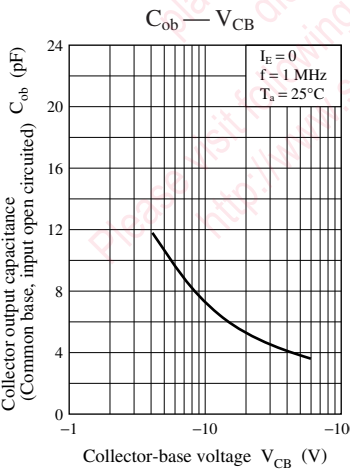
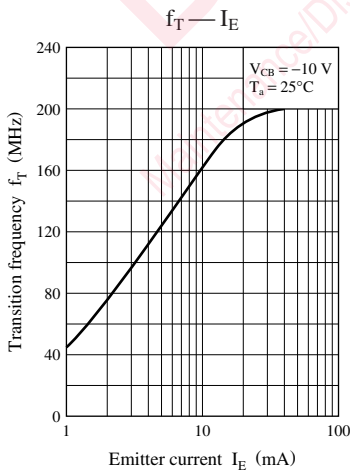
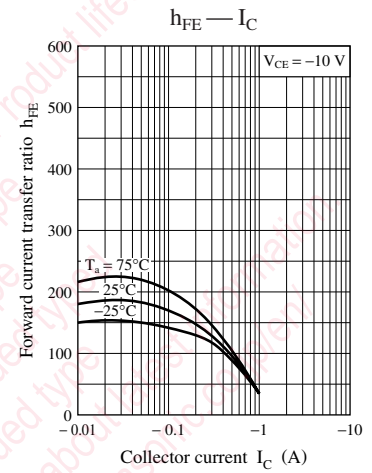
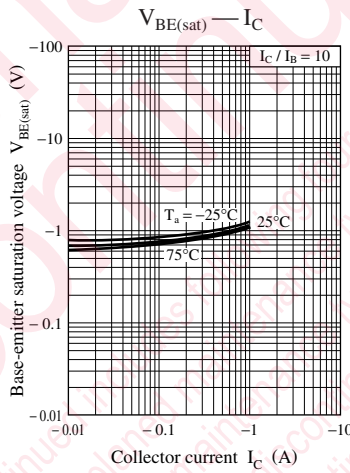
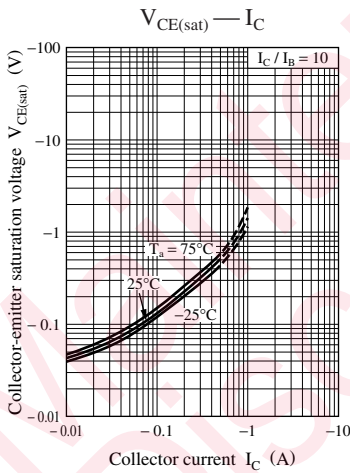
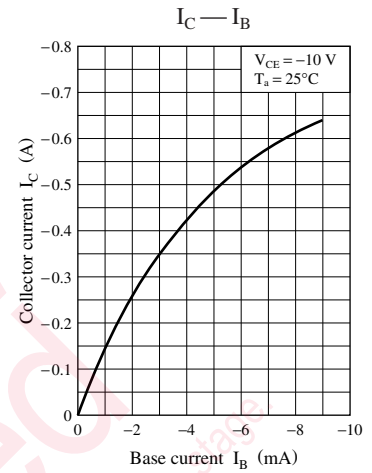
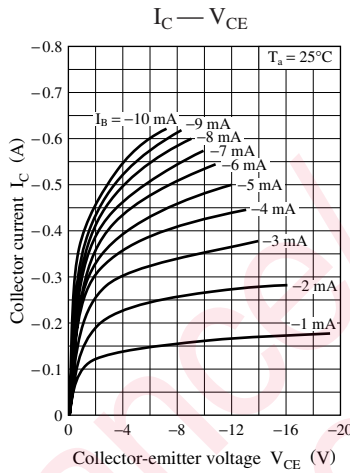
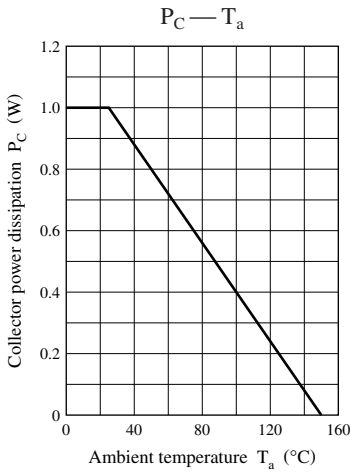
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

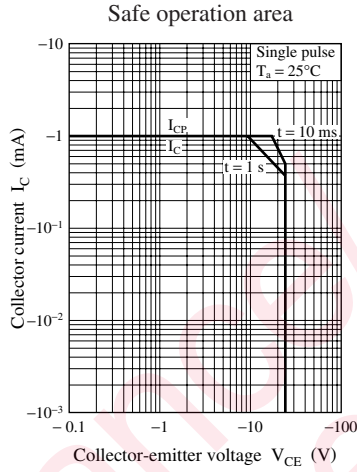
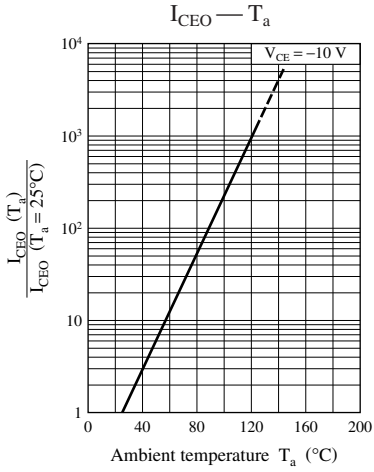
2. *1: Pulse measurement

*2: Rank classification

Rank	Q	R	S
h_{FE1}	80 to 170	120 to 240	170 to 340







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 discontinued type
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