2SA1619, 2SA1619A

Silicon PNP epitaxial planer type

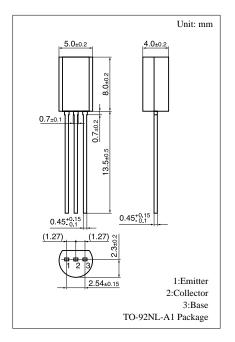
For low-frequency power amplification and driver amplification Complementary to 2SC4208 and 2SC4208A

Features

- Complementary pair with 2SC4208 and 2SC4208A.
- Allowing supply with the radial taping and automatic insertion possible.

Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit	
Collector to	2SA1619	17	-30	37	
base voltage	2SA1619A	V_{CBO}	-60	V	
Collector to	2SA1619	77	-25	V 7	
emitter voltage	2SA1619A	V_{CEO}	-50	V	
Emitter to base voltage		V_{EBO}	-5	V	
Peak collector current		I_{CP}	-1	A	
Collector current		I_C	- 0.5	A	
Collector power dissipation		P_{C}	1	W	
Junction temperature		Tj	150	°C	
Storage temperature		$T_{\rm stg}$	−55 ~ +150	°C	



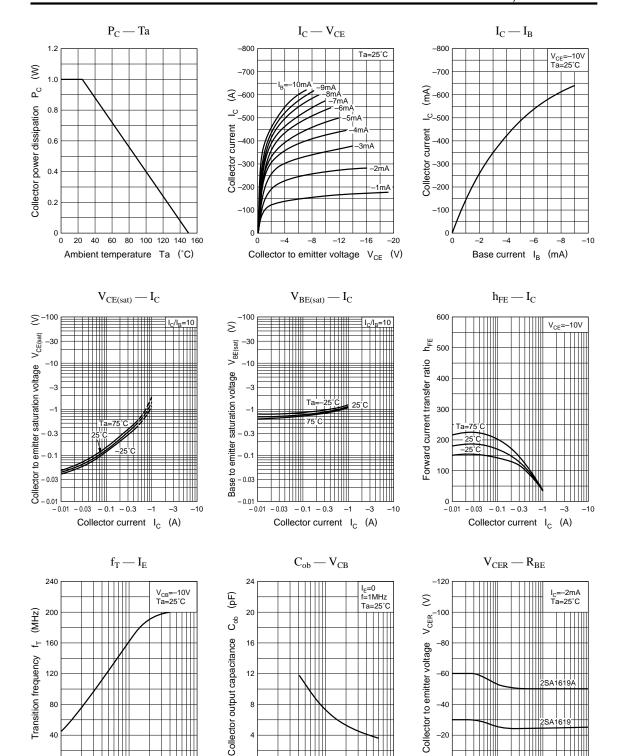
Electrical Characteristics (Ta=25°C)

Parameter		Symbol	Conditions	min	typ	max	Unit	
Collector cutoff current		I _{CBO}	$V_{CB} = -20V, I_E = 0$			- 0.1	μΑ	
Collector to base	2SA1619	N/	I 100 A I 0	-30			N.	
voltage	2SA1619A	V _{CBO}	$I_{\rm C} = -10 \mu A, I_{\rm E} = 0$	-60			V	
Collector to emitter	2SA1619			-25				
voltage	2SA1619A	V _{CEO}	$I_{\rm C} = -10 \text{mA}, I_{\rm B} = 0$	-50			V	
Emitter to base voltage		V _{EBO}	$I_{\rm E} = -10\mu A, I_{\rm C} = 0$	-5			V	
Forward current transfer ratio		h _{FE1} *	$V_{CE} = -10V, I_{C} = -150mA$	85	160	340		
		h _{FE2}	$V_{CE} = -10V, I_{C} = -500mA$	40				
Collector to emitter saturation voltage V		V _{CE(sat)}	$I_C = -300 \text{mA}, I_B = -30 \text{mA}$		- 0.35	- 0.6	V	
		V _{BE(sat)}	$I_C = -300 \text{mA}, I_B = -30 \text{mA}$		-1.1	-1.5	V	
Transition frequency		f_T	$V_{CB} = -10V$, $I_E = 50mA$, $f = 200MHz$		200		MHz	
Collector output capacitance		C _{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		6	15	pF	

*h_{FE1} Rank classification

Rank	Q	R	S	
h _{FE1}	85 ~ 170	120 ~ 240	170 ~ 340	

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-3

-30

-100

-10

Collector to base voltage $\ \ V_{CB} \ \ (V)$

30

100

10

Emitter current I_E (mA)

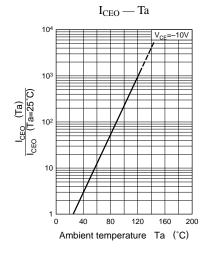
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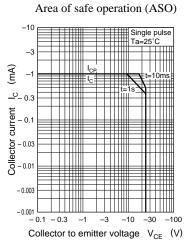
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3 10 30 100

Base to emitter resistance

 R_{BE} (k Ω)





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