

2SA0719, 2SA0720 (2SA719, 2SA720)

Silicon PNP epitaxial planar type

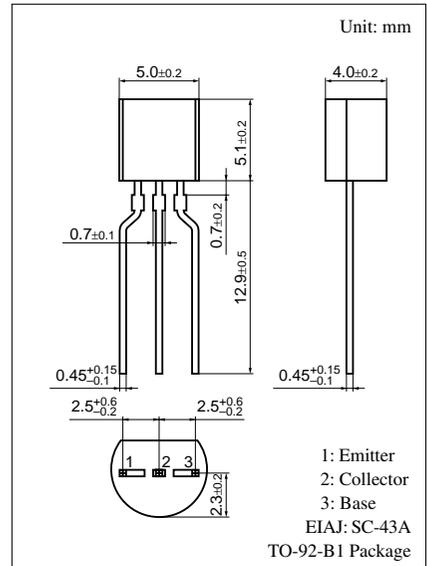
For low-frequency power amplification and driver amplification
Complementary to 2SC1317 and 2SC1318

■ Features

- Complementary pair with 2SC1317 and 2SC1318.

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

Parameter	Symbol	Rating	Unit	
Collector to base voltage	2SA0719	V_{CB0}	-30	V
	2SA0720		-60	
Collector to emitter voltage	2SA0719	V_{CEO}	-25	V
	2SA0720		-50	
Emitter to base voltage	V_{EBO}	-5	V	
Peak collector current	I_{CP}	-1	A	
Collector current	I_C	-500	mA	
Collector power dissipation	P_C	625	mW	
Junction temperature	T_j	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	



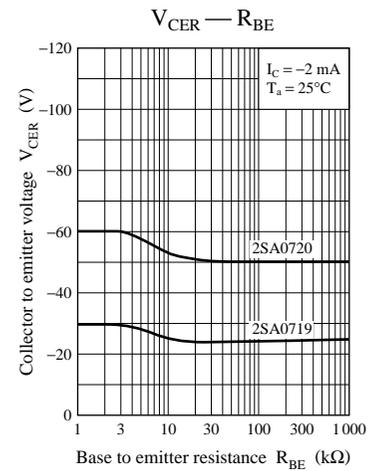
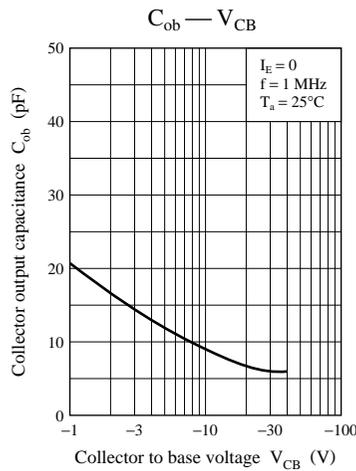
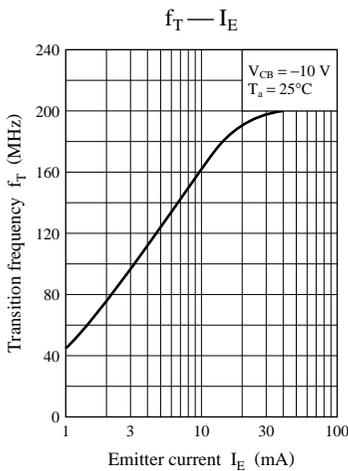
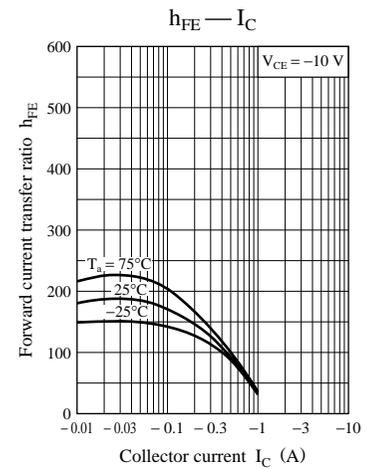
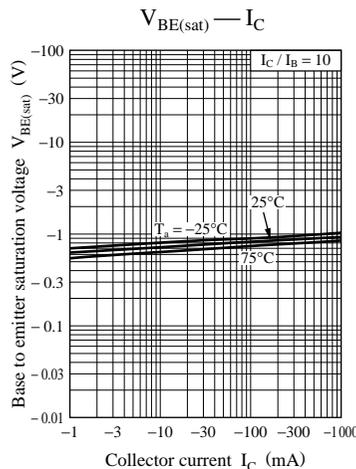
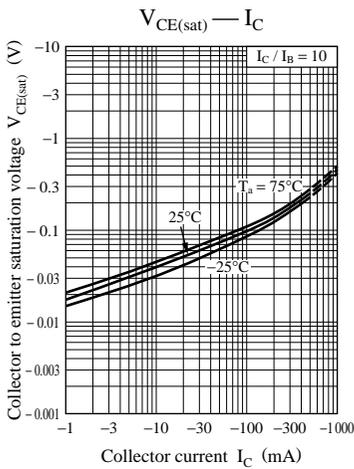
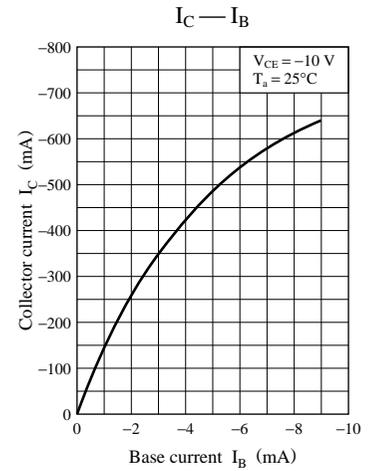
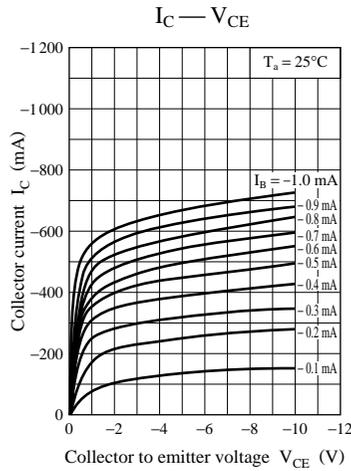
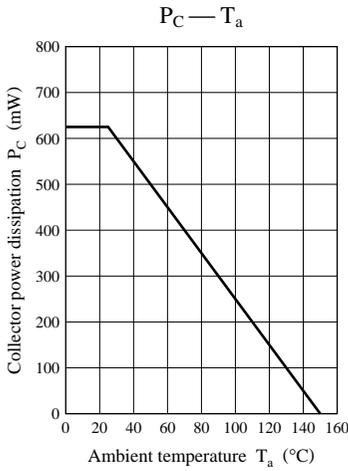
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

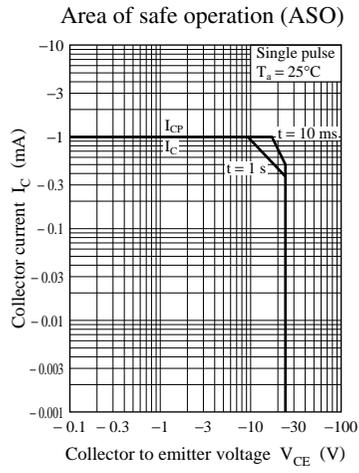
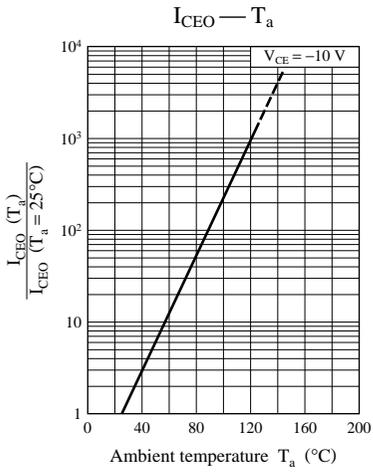
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -20\text{ V}, I_E = 0$			-0.1	μA
Collector to base voltage	V_{CB0}	$I_C = -10\ \mu\text{A}, I_E = 0$	-30			V
			-60			
Collector to emitter voltage	V_{CEO}	$I_C = -10\ \text{mA}, I_B = 0$	-25			V
			-50			
Emitter to base voltage	V_{EBO}	$I_E = -10\ \mu\text{A}, I_C = 0$	-5			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10\ \text{V}, I_C = -150\ \text{mA}$	85		340	
	h_{FE2}	$V_{CE} = -10\ \text{V}, I_C = -500\ \text{mA}$	40			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300\ \text{mA}, I_B = -30\ \text{mA}$		-0.35	-0.6	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -300\ \text{mA}, I_B = -30\ \text{mA}$		-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	C_{ob}	$V_{CB} = -10\ \text{V}, I_E = 0, f = 1\ \text{MHz}$		6	15	pF

Note) *: h_{FE1} Rank classification

Rank	Q	R	S
h_{FE1}	85 to 170	120 to 240	170 to 340

Note) The part numbers in the parenthesis show conventional part number.





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