2SA1123

Silicon PNP epitaxial planar type

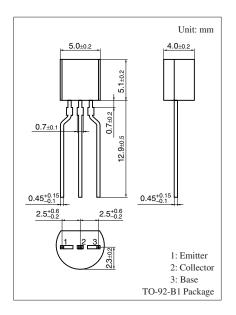
For low-frequency high breakdown voltage amplification Complementary to 2SC2631

■ Features

- \bullet Satisfactory forward current transfer ratio h_{FE} collector current I_{C} characteristics.
- ullet High collector-emitter voltage (Base open) V_{CEO}
- \bullet Small collector output capacitance (Common base, input open circuited) C_{ob}
- Makes up a complementary pair with 2SC2631, which is optimum for the pre-driver stage of a 20 W to 40 W output amplifier.

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-150	V
Collector-emitter voltage (Base open)	V _{CEO}	-150	V
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	750	mW
Junction temperature	T_j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



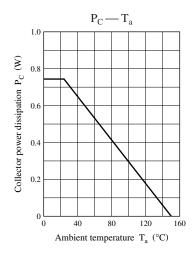
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

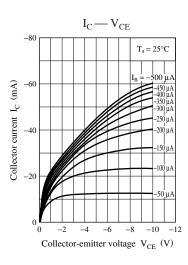
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = -100 \mu\text{A}, I_B = 0$	-150			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \ \mu A, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -100 \text{ V}, I_E = 0$			-1	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = -5 \text{ V}, I_{C} = -10 \text{ mA}$	130		450	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = -30 \text{ mA}, I_B = -3 \text{ mA}$			-1	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 10 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			5	pF
(Common base, input open circuited)						
Noise voltage	NV	$V_{CE} = -40 \text{ V}, I_{C} = -1 \text{ mA}, G_{V} = 80 \text{ dB}$		150	300	mV
		$R_g = 100 \text{ k}\Omega$, Function = FLAT				

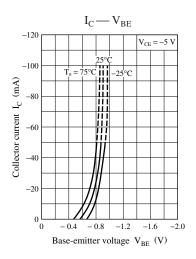
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

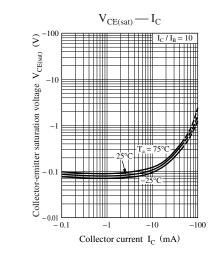
2. *: Rank classification

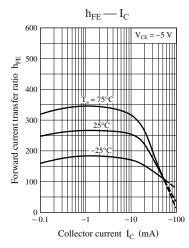
Rank	R	S	Т	
h _{FE}	130 to 220	185 to 330	260 to 450	

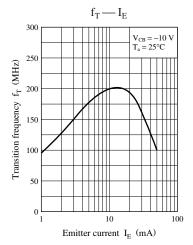


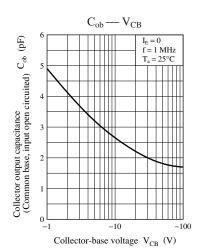












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