2SA0777 (2SA777)

Silicon PNP epitaxial planar type

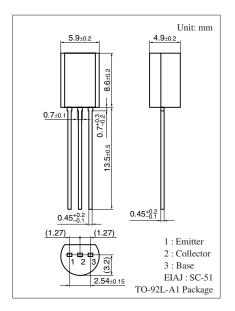
For low-frequency driver amplification Complementary to 2SC1509

■ Features

- ullet High collector-emitter voltage (Base open) V_{CEO}
- Optimum for the driver stage of a low-frequency and 25 W to 30 W output amplifier.

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-80	V
Collector-emitter voltage (Base open)	V _{CEO}	-80	V
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	°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-base voltage (Emitter open)	V _{CBO}	$I_C = -10 \ \mu A, I_E = 0$	-80			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = -100 \ \mu A, \ I_B = 0$	-80			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = -1 \mu A, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Forward current transfer ratio *1	h _{FE1} *2	$V_{CE} = -10 \text{ V}, \ I_{C} = -150 \text{ mA}$	90		220	_
	h _{FE2}	$V_{CE} = -5 \text{ V}, \ I_{C} = -500 \text{ mA}$	50	100		
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		- 0.2	- 0.4	V
Base-emitter saturation voltage	V _{BE(sat)}	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		- 0.85	-1.2	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		120		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		11	20	pF
(Common base, input open circuited)						

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

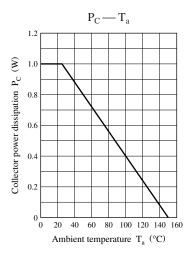
2. *1: Palse measurement

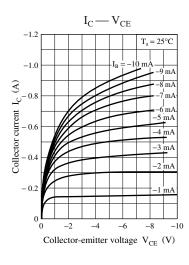
*2: Rank classification

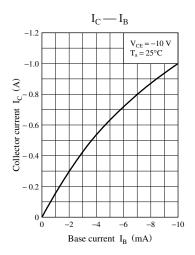
Rank	Q	R
$h_{\mathrm{FE}1}$	90 to 155	130 to 220

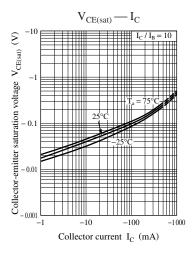
Note) The part number in the parenthesis shows conventional part number.

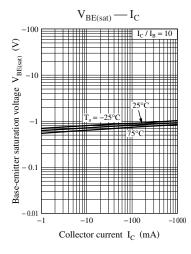
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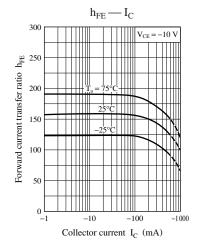


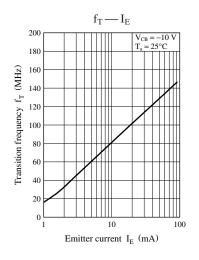


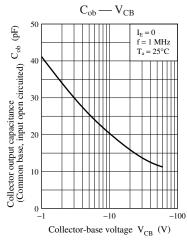


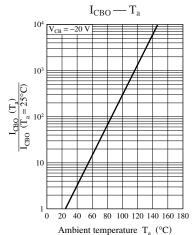


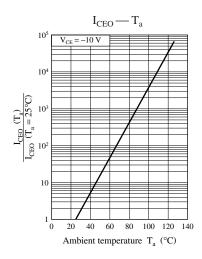


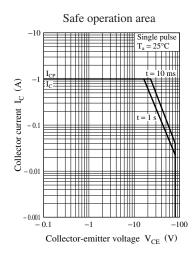












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