2SB0766, 2SB0766A (2SB766, 2SB766A)

Silicon PNP epitaxial planar type

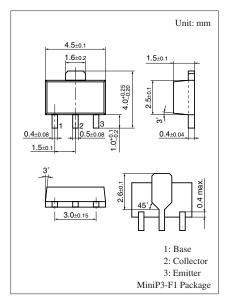
For low-frequency output amplification Complementary to 2SD0874 (2SD874), 2SD0874A (2SD874A)

Features

- Large collector power dissipation P_C
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage	2SB0766	V_{CBO}	-30	V
(Emitter open)	2SB0766A		-60	
Collector-emitter voltage	2SB0766	V _{CEO}	-25	V
(Base open)	2SB0766A		-50	
Emitter-base voltage (Coll	V_{EBO}	-5	V	
Collector current	I_C	-1	A	
Peak collector current	I_{CP}	-1.5	A	
Collector power dissipation	P _C	1	W	
Junction temperature	T_{j}	150	°C	
Storage temperature	T_{stg}	-55 to +150	°C	



Marking Symbol:

2SB0766: A2SB0766A: B

Note) *: Print circuit board: Copper foil area of 1 cm² or more, and the board thickness of 1.7 mm for the collector portion.

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

Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage	2SB0766	V_{CBO}	$I_C = -10 \ \mu A, I_E = 0$	-30			V
(Emitter open)	2SB0766A			-60			
Collector-emitter voltage	2SB0766	V _{CEO}	$I_C = -2 \text{ mA}, I_B = 0$	-25			V
(Base open)	2SB0766A			-50			
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}	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Forward current transfer ratio *1		h _{FE1} *2	$V_{CE} = -10 \text{ V}, I_{C} = -500 \text{ mA}$	85		340	_
		h _{FE2}	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	50			
Collector-emitter saturation voltage *1		V _{CE(sat)}	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		- 0.2	- 0.4	V
Base-emitter saturation voltage *1		V _{BE(sat)}	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		- 0.85	-1.20	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}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		20	30	pF
(Common base, input open circuited)							

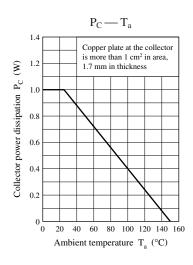
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

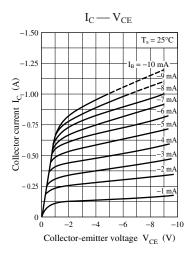
2. *1: Pulse measurement

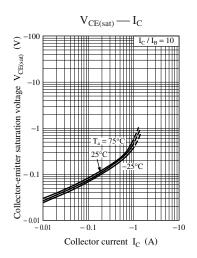
*2: Rank classification

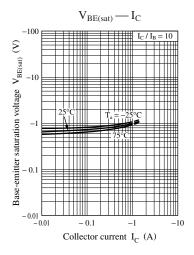
Rank	Q	R	S	
h_{FE1}	85 to 170	120 to 240	170 to 340	

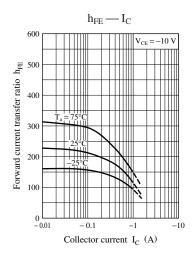
Note) The part numbers in the parenthesis show conventional part number.

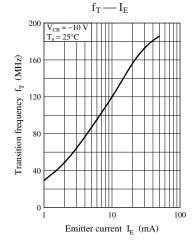


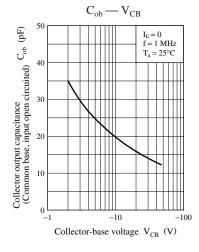


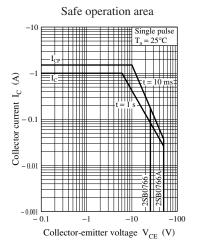












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