Panasonic

2SB0873A

Silicon PNP epitaxial planar type

For low frequency power amplification For DC-DC converter

■ Features

- ullet Low collector-emitter saturation voltage $V_{\text{CE(sat)}}$
- \bullet Large collector current $I_{\rm C}$

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	-35	V	
Collector-emitter voltage (Base open)	V _{CEO}	-30	V	
Emitter-base voltage (Collector open)	V _{EBO}	-7	V	
Collector current	I_{C}	-5	A	
Peak collector current	I_{CP}	-10	A	
Collector power dissipation	P _C	1	W	
Junction temperature	T_{j}	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C ,	

■ Package

- Code
 - TO-92L-A1
- Pin Name
 - 1. Emitter
 - 2. Collector
 - 3. Base

■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

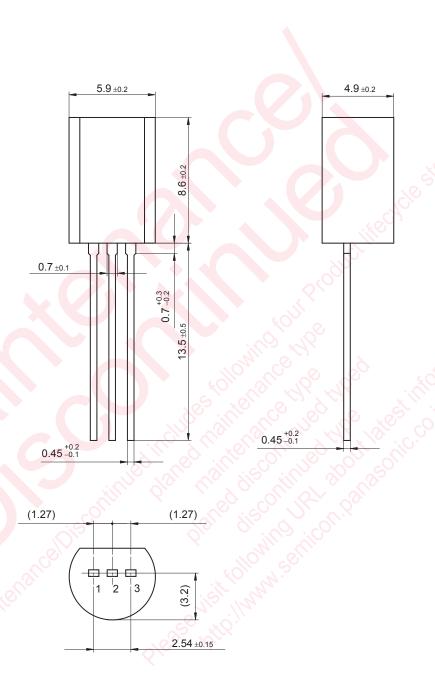
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -1 \text{ mA}, I_{\rm B} = 0$	-30	10.		V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = -10 \mu\text{A}, I_C = 0$	0-7	0//		V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -10 \text{ V}, I_E = 0$			-100	nA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$	80		-100	nA
Forward current transfer ratio *1,2	h_{FE}	$V_{CE} = -2 \text{ V}, I_{C} = -2 \text{ A}$	90		625	_
Collector-emitter saturation voltage *1	V _{CE(sat)}	$I_C = -3 \text{ A}, I_B = -0.1 \text{ A}$			-1	V
Transition frequency	f_T	$V_{CB} = -6 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		120		MHz
Collector output capacitance (Common base, input open circuited)	C _{ob}	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			85	pF

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	Р	Q	R	
h_{FE}	90 to 135	120 to 205	180 to 625	

TO-92L-A1 Unit: mm



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