

2SB793, 2SB793A

Silicon PNP Epitaxial Planar Type

For low-frequency output amplification
Complementary pair with 2SD973 and 2SD973A

■ Features

- Low collector-emitter saturation voltage $V_{CEO(sat)}$
- An M type mold package that allows easy manual and automatic insertion.
Can be firmly mounted flush to PCB surface.

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

Item	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-30	V
		-60	
Collector-Emitter Voltage	V_{CEO}	-25	V
		-50	
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Collector Voltage	I_{CP}	-1.5	A
Collector Current	I_C	-1	A
Collector Power Dissipation	P_C^*	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

* Copper foil on PCB against Collector: 1.7mm thick, 1cm^2 in area

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

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	μA
Collector-Base Voltage	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-30			V
			-60			
Collector-Emitter Voltage	V_{CEO}	$I_C = -2\text{mA}, I_E = 0$	-25			V
			-50			
Emitter-Base Voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
DC Current Gain	h_{FE1}^{*1}	$V_{CE} = -10\text{V}, I_C = -500\text{mA}^{*2}$	85		340	
	h_{FE2}	$V_{CE} = -5\text{V}, I_C = -1\text{A}^{*2}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.2	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

*2 Pulse Measurement

*1 h_{FE1} Ranking

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

■ Package Dimensions





