

2SB0774 (2SB774)

Silicon PNP epitaxial planer type

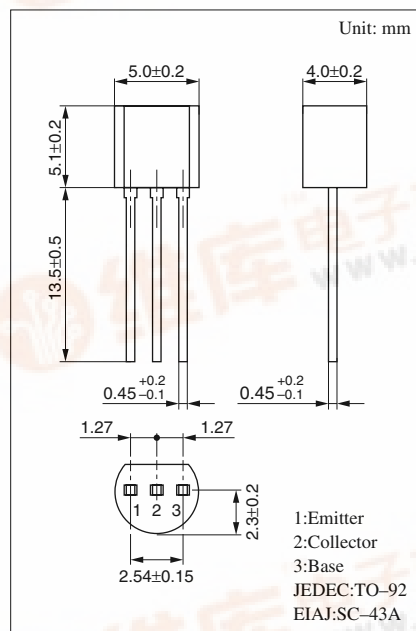
For low-frequency amplification

Features

- High emitter to base voltage V_{EBO} .
- Protective diodes and resistances between emitter and base can be omitted.

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

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-30	V
Collector to emitter voltage	V_{CEO}	-25	V
Emitter to base voltage	V_{EBO}	-15	V
Peak collector current	I_{CP}	-200	mA
Collector current	I_C	-100	mA
Collector power dissipation	P_C	400	mW
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

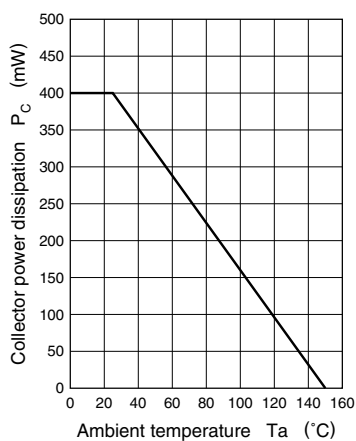
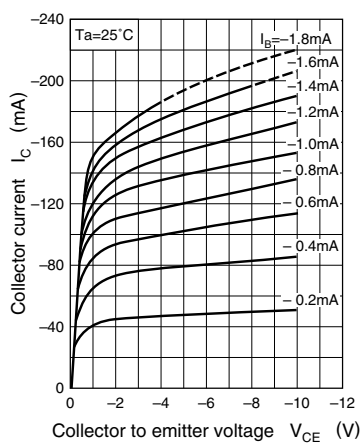
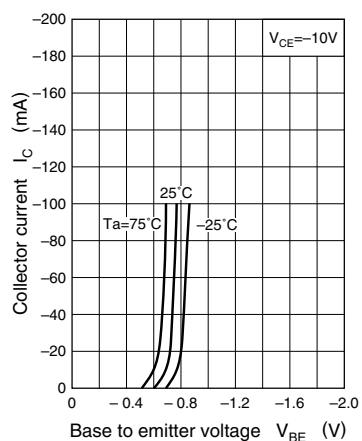
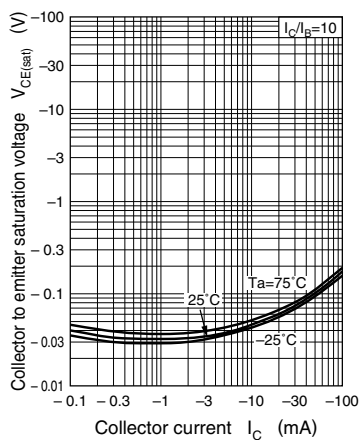
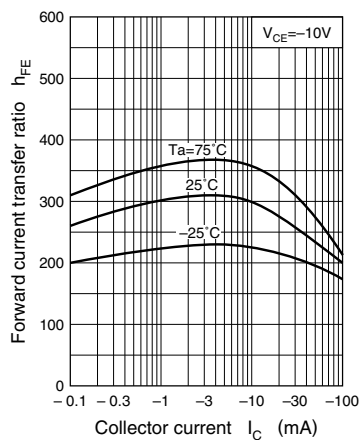
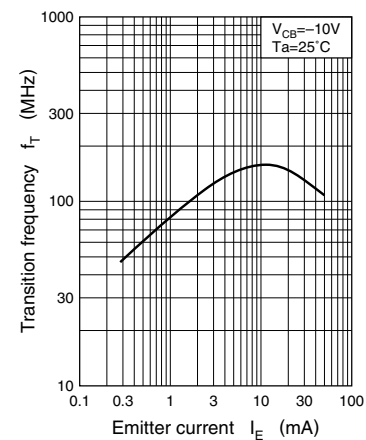
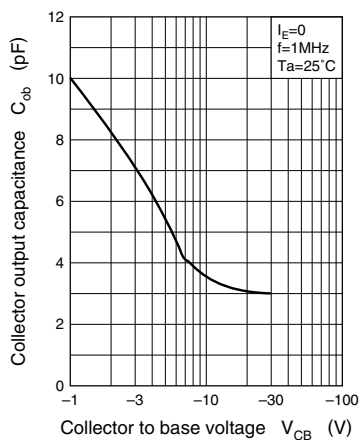


Electrical Characteristics ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -10\text{V}, I_E = 0$			-1	μA
	I_{CEO}	$V_{CE} = -20\text{V}, I_B = 0$			-100	μA
Collector to base voltage	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-30			V
Collector to emitter voltage	V_{CEO}	$I_C = -2\text{mA}, I_B = 0$	-25			V
Emitter to base voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-15			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10\text{V}, I_C = -2\text{mA}$	210		460	
	h_{FE2}	$V_{CE} = -2\text{V}, I_C = -100\text{mA}$	90			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-0.5	V
Transition frequency	f_T	$V_{CB} = -10\text{V}, I_E = 2\text{mA}, f = 200\text{MHz}$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		4		pF

* h_{FE1} Rank classification

Rank	R	S
h_{FE1}	210 ~ 340	290 ~ 460

$P_C - T_a$  $I_C - V_{CE}$  $I_C - V_{BE}$  $V_{CE(\text{sat})} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$ 

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