

# 2SB774

## Silicon PNP epitaxial planer type

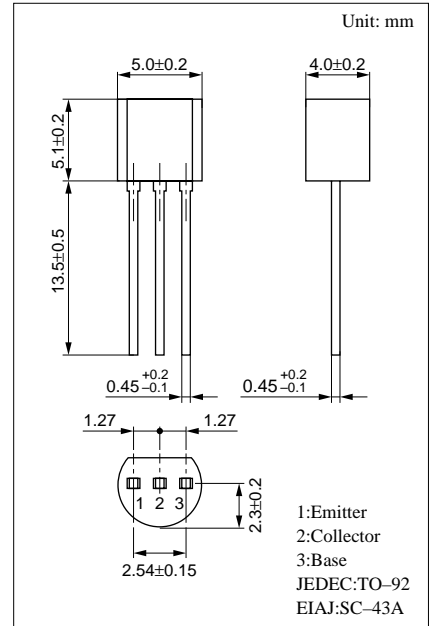
For low-frequency amplification

### Features

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

### Absolute Maximum Ratings (Ta=25°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	°C
Storage temperature	$T_{stg}$	-55 ~ +150	°C



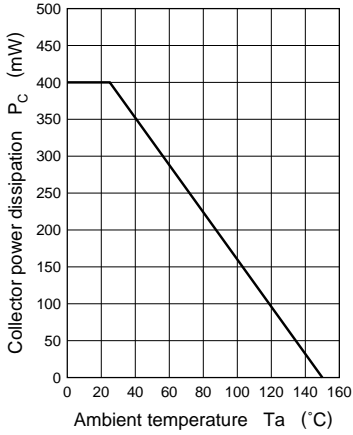
### Electrical Characteristics (Ta=25°C)

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

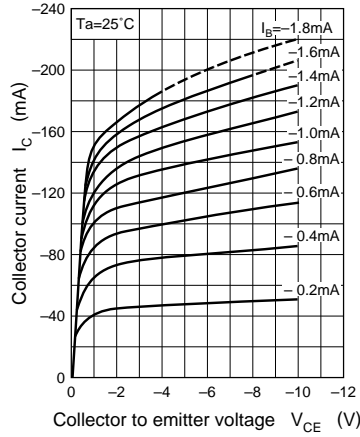
\* $h_{FE1}$  Rank classification

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

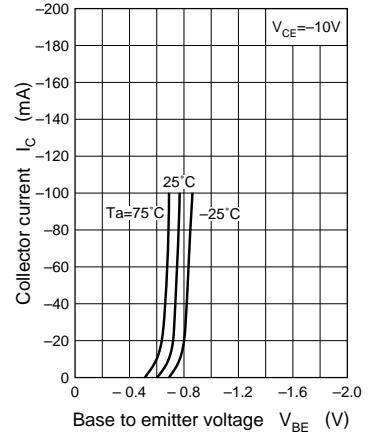
$P_C - T_a$



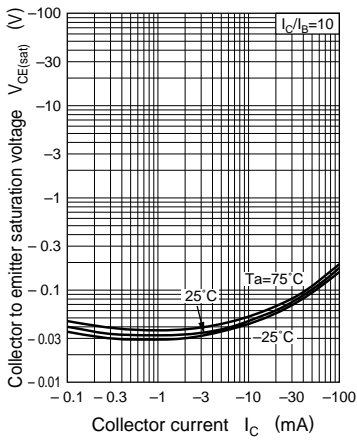
$I_C - V_{CE}$



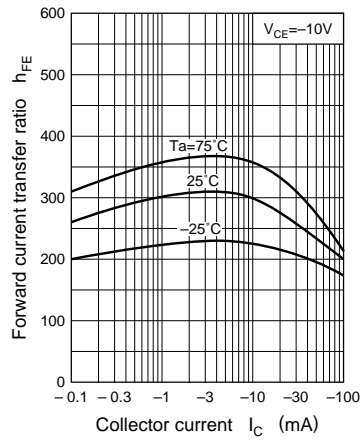
$I_C - V_{BE}$



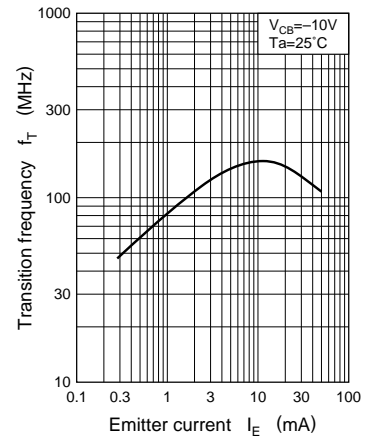
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$

