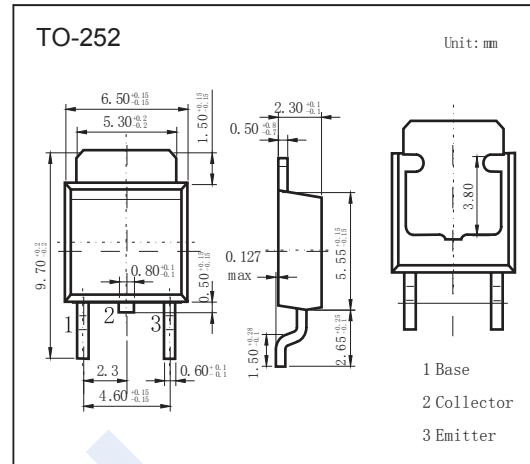


## PNP Transistors

## 2SB929A

## ■ Features

- High forward current transfer ratio  $h_{FE}$   
which has satisfactory linearity
- Low collector to emitter saturation voltage  $V_{CE(sat)}$
- Complementary to 2SD1252A

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

Parameter	Symbol	Rating	Unit	
Collector - Base Voltage	$V_{CBO}$	-80	V	
Collector - Emitter Voltage	$V_{CEO}$	-80		
Emitter - Base Voltage	$V_{EBO}$	-5		
Collector Current - Continuous	$I_C$	-3	A	
Collector current - Pulse	$I_{CP}$	-5		
Collector Power Dissipation	$P_C$	$T_c = 25^\circ\text{C}$	35	W
		$T_a = 25^\circ\text{C}$	1.3	
Junction Temperature	$T_J$	150	$^\circ\text{C}$	
Storage Temperature range	$T_{stg}$	-55 to 150		

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C = -100 \mu\text{A}, I_E = 0$	-80			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = -30 \text{ mA}, I_B = 0$	-80			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -80\text{V}, I_E = 0$			-0.1	mA
Collector cutoff current	$I_{CES}$	$V_{CE} = -80\text{V}, V_{BE} = 0$			-200	$\mu\text{A}$
Collector cutoff current	$I_{CEO}$	$V_{CE} = -60\text{V}, I_B = 0$			-300	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	mA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3 \text{ A}, I_B = -375\text{mA}$			-1.2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -3 \text{ A}, I_B = -375\text{mA}$			-1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = -4 \text{ V}, I_C = -3 \text{ A}$			-1.8	
DC current gain	$h_{FE(1)}$	$V_{CE} = -4 \text{ V}, I_C = -1 \text{ A}$	70		250	
	$h_{FE(2)}$	$V_{CE} = -4 \text{ V}, I_C = -3 \text{ A}$	10			
Turn-on time	$t_{on}$	$I_C = -1\text{A}, I_{B1} = -0.1\text{A}, I_{B2} = 0.1\text{A}$		0.5		$\mu\text{s}$
Storage time	$t_{stg}$		1.2			
Fall time	$t_f$		0.3			
Transition frequency	$f_T$	$V_{CE} = -10\text{V}, I_C = -500\text{mA}, f = 10\text{MHz}$		30		MHz

■ Classification of  $h_{FE(1)}$ 

Type	2SB929A-Q	2SB929A-P
Range	70-150	120-250

# PNP Transistors

## 2SB929A

### Typical Characteristics

