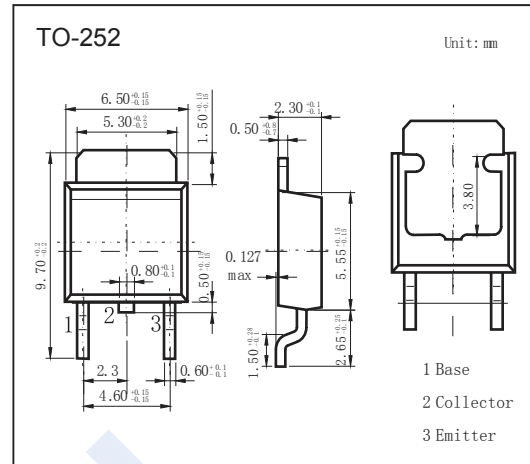


PNP Transistors

2SB929

■ Features

- High forward current transfer ratio h_{FE}
which has satisfactory linearity
- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Complementary to 2SD1252

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

Parameter	Symbol	Rating	Unit	
Collector - Base Voltage	V_{CBO}	-60	V	
Collector - Emitter Voltage	V_{CEO}	-60		
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}	$I_C = -100 \mu\text{A}, I_E = 0$	-60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -30 \text{mA}, I_B = 0$	-60			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -60\text{V}, I_E = 0$			-0.1	mA
Collector cutoff current	I_{CES}	$V_{CE} = -60\text{V}, V_{BE} = 0$			-200	μA
Collector cutoff current	I_{CEO}	$V_{CE} = -30\text{V}, I_B = 0$			-300	μA
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		μs
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	2SB929-Q	2SB929-P
Range	70-150	120-250

PNP Transistors

2SB929

■ Typical Characteristics

