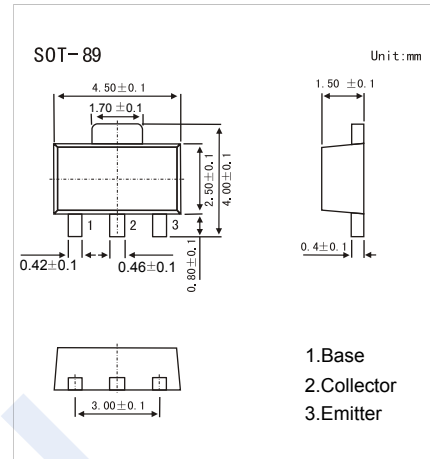


## PNP Transistors

### 2SB1424

#### ■ Features

- Excellent DC current gain
- Low collector-emitter saturation voltage
- Complementary to 2SD2150



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-20	V
Collector - Emitter Voltage	$V_{CE0}$	-20	
Emitter - Base Voltage	$V_{EB0}$	-6	
Collector Current - Continuous	$I_C$	-3	A
Collector Power Dissipation	$P_C$	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
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	$V_{CB0}$	$I_C = -100 \mu\text{A}, I_E = 0$	-20			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -1 \text{ mA}, I_B = 0$	-20			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu\text{A}, I_C = 0$	-6			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2 \text{ A}, I_B = -100 \text{ mA}$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2 \text{ A}, I_B = -100 \text{ mA}$			-1.2	
DC current gain	$h_{FE}$	$V_{CE} = -2\text{V}, I_C = -100 \text{ mA}$	120		390	
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		35		pF
Transition frequency	$f_T$	$V_{CE} = -2\text{V}, I_C = -500 \text{ mA}, f = 100\text{MHz}$		240		MHz

#### ■ Classification of $h_{FE}$

Type	2SB1424-Q	2SB1424-R
Range	120-270	180-390
Marking	AEQ	AER

# PNP Transistors

## 2SB1424

### Typical Characteristics

