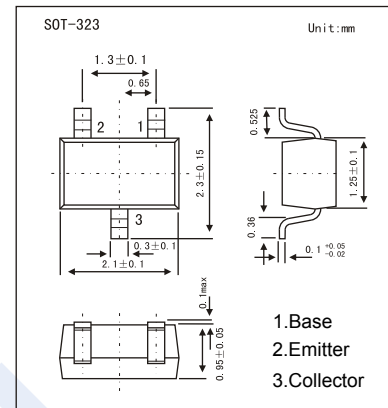


## PNP Transistors

### 2SA1577

#### ■ Features

- Large  $I_c$ .  $C_{Max.} = -500\text{mA}$
- Low  $V_{CE(sat)}$ . Ideal for low-voltage operation.
- Complements the 2SC4097.



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	-40	V
Collector - Emitter Voltage	$V_{CEO}$	-32	
Emitter - Base Voltage	$V_{EBO}$	-5	
Collector Current - Continuous	$I_c$	-500	mA
Collector Power Dissipation	$P_c$	200	mW
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	$V_{CBO}$	$I_c = -100 \mu\text{A}$ , $I_E = 0$	-40			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_c = -1 \text{mA}$ , $I_B = 0$	-32			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu\text{A}$ , $I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -20 \text{V}$ , $I_E = 0$			-1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4 \text{V}$ , $I_C = 0$			-1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{mA}$ , $I_B = -10 \text{mA}$			-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 \text{mA}$ , $I_B = -10 \text{mA}$			-1.2	
DC current gain	$h_{FE}$	$V_{CE} = -3 \text{V}$ , $I_C = -10 \text{mA}$	82		390	
Collector output capacitance	$C_{ob}$	$V_{CB} = -10 \text{V}$ , $I_E = 0$ , $f = 1 \text{MHz}$		7		pF
Transition frequency	$f_t$	$V_{CE} = -5 \text{V}$ , $I_C = -20 \text{mA}$ , $f = 100 \text{MHz}$		200		MHz

#### ■ Classification of $h_{FE}$

Type	2SA1577-P	2SA1577-Q	2SA1577-R
Range	82-180	120-270	180-390
Marking	HP	HQ	HR

# PNP Transistors

## 2SA1577

### ■ Typical Characteristics

