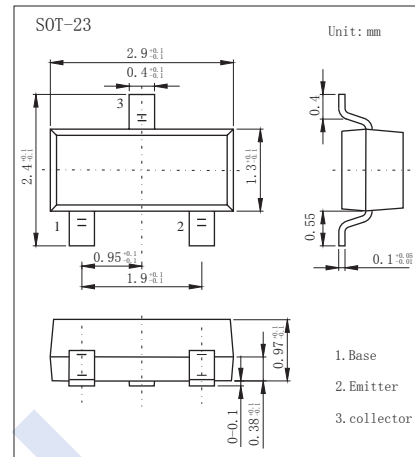


## PNP Transistors

### 2SA1036 (2SA1036K)

#### ■ Features

- Large  $I_c$ .  $I_{cMax.} = -500mA$
- Low  $V_{CE(sat)}$ . Ideal for low-voltage operation.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-40	V
Collector-emitter voltage	$V_{CEO}$	-32	V
Emitter-base voltage	$V_{EBO}$	-5	V
Collector current *	$I_c$	-0.5	A
Collector power dissipation	$P_c$	0.2	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\*  $P_c$  max. must not be exceeded.

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_c = -100 \mu A, I_E = 0$	-40			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_c = -1 mA, I_B = 0$	-32			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu A, I_c = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -20 V, I_E = 0$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_c = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -100mA, I_B = -1mA$			-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -100mA, I_B = -1mA$			-1.2	
DC current gain	$h_{FE}$	$V_{CE} = -3V, I_c = -10mA$	82		390	
Output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		7		pF
Transition frequency	$f_T$	$V_{CE} = -5V, I_E = -20mA, f = 100MHz$		200		MHz

#### ■ $h_{FE}$ Classification

Marking	HP	HQ	HR
Rank	P	Q	R
$h_{FE}$	82~180	120~270	180~390

# PNP Transistors

## 2SA1036 (2SA1036K)

■ Typical Characteristics

