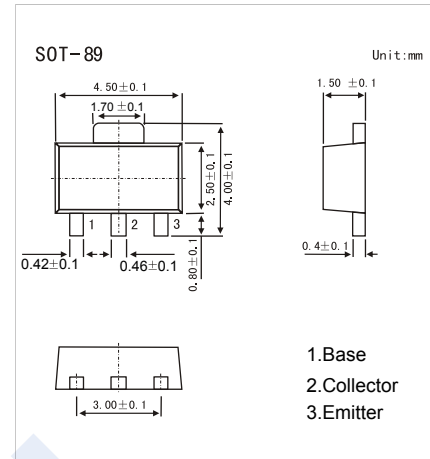


## PNP Transistors

## KTA1001

## ■ Features

- Low Collector Saturation Voltage
- High Power Dissipation

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

Parameter	Symbol	Rating	Unit	
Collector - Base Voltage	$V_{CB0}$	-35	V	
Collector - Emitter Voltage	$V_{CE0}$	-20		
Emitter - Base Voltage	$V_{EB0}$	-8		
Collector Current - Continuous	$I_C$	-3	A	
Collector Current - Pulse	$I_{CP}$	-5		
Base Current	$I_B$	-0.5		
Collector Power Dissipation	$P_C$	$T_a = 25^\circ\text{C}$	0.5	W
		$T_c = 25^\circ\text{C}$	1	
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	$V_{CB0}$	$I_C = -1\text{ mA}, I_E = 0$	-35			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -10\text{ mA}, I_B = 0$	-20			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -1\text{ mA}, I_C = 0$	-8			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = -35\text{ V}, I_E = 0$			-100	nA
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -8\text{ V}, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3\text{ A}, I_B = -75\text{ mA}$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -3\text{ A}, I_B = -75\text{ mA}$			-1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = -2\text{ V}, I_C = -3\text{ A}$			-1.5	
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{ V}, I_C = -500\text{ mA}$	100		320	
	$h_{FE(2)}$	$V_{CE} = -2\text{ V}, I_C = -3\text{ A}$	70			
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		62		pF
Transition frequency	$f_T$	$V_{CE} = -2\text{ V}, I_C = -500\text{ mA}$		170		MHz

■ Classification of  $h_{FE(1)}$ 

Type	KTA1001-O	KTA1001-Y
Range	100-200	160-320
Marking	KO	KY

### PNP Transistors

### KTA1001

■ Typical Characteristics

