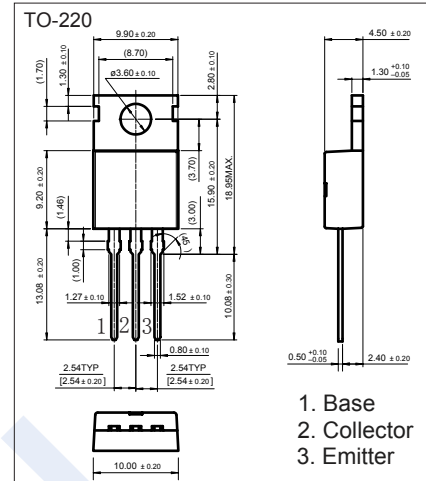


## PNP Transistors

## KTA1038

## ■ Features

- High Breakdown Voltage
- Low Collector Saturation Voltage
- Complementary to KTC2018

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-100	V
Collector - Emitter Voltage	$V_{CE0}$	-100	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-5	A
Base Current	$I_B$	-0.5	
Emitter Current	$I_E$	5	
Collector Power Dissipation $T_c = 25^\circ\text{C}$	$P_C$	40	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	$V_{CB0}$	$I_C = -10\text{ mA}, I_E = 0$	-100			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -50\text{ mA}, I_B = 0$	-100			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -10\text{ mA}, I_C = 0$	-5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = -100\text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	$\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -4\text{ A}, I_B = -400\text{ mA}$			-2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -4\text{ A}, I_B = -400\text{ mA}$			-1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = -5\text{ V}, I_C = -4\text{ A}$			-1.5	
DC current gain	$h_{FE(1)}$	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	70		240	
	$h_{FE(2)}$	$V_{CE} = -5\text{ V}, I_C = -4\text{ A}$	20			
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		90		$\text{pF}$
Transition frequency	$f_T$	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$		30		$\text{MHz}$

■ Classification of  $h_{fe(1)}$ 

Type	KTA1038-O	KTA1038-Y
Range	70-140	120-240

### PNP Transistors

### KTA1038

■ Typical Characteristics

