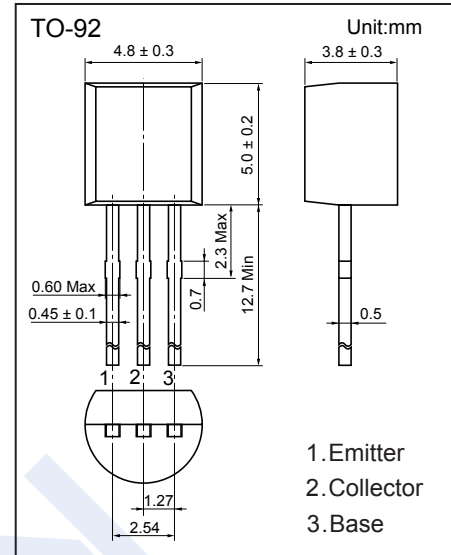


## NPN Transistors

## KTC3202

## ■ Features

- Excellent hFE Linearity
- Complementary to KTA1270

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	35	V
Collector - Emitter Voltage	$V_{CE0}$	30	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_c$	500	mA
Collector Power Dissipation	$P_c$	625	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	$V_{CB0}$	$I_c = 100\mu\text{A}$ , $I_E = 0$	35			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c = 1\text{ mA}$ , $I_B = 0$	30			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100\mu\text{A}$ , $I_c = 0$	5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = 35\text{ V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 5\text{ V}$ , $I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 100\text{ mA}$ , $I_B = 10\text{ mA}$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 100\text{ mA}$ , $I_B = 10\text{ mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 1\text{ V}$ , $I_c = 100\text{ mA}$			1	
DC current gain	$h_{FE}$	$V_{CE} = 1\text{ V}$ , $I_c = 100\text{ mA}$	70		240	
		$V_{CE} = 6\text{ V}$ , $I_c = 400\text{ mA}$	O	25		
			Y	40		
Collector output capacitance	$C_{ob}$	$V_{CB} = 6\text{ V}$ , $I_E = 0$ , $f = 1\text{ MHz}$		7		$\mu\text{F}$
Transition frequency	$f_T$	$V_{CE} = 6\text{ V}$ , $I_c = 20\text{ mA}$		300		MHz

■ Classification of  $h_{FE}(1)$ 

Type	KTC3202-O	KTC3202-Y
Range	70-140	120-240

### NPN Transistors

### KTC3202

■ Typical Characteristics

